

Return of Organization Exempt From Income Tax

2022

Department of the Treasury
Internal Revenue Service

Under section 501(c), 527, or 4947(a)(1) of the Internal Revenue Code (except private foundations)

Do not enter social security numbers on this form as it may be made public.

Go to www.irs.gov/Form990 for instructions and the latest information.

Open to Public Inspection

A For the **2022** calendar year, or tax year beginning **01/01/2022** and ending **12/31/2022**

B Check if applicable:
 Address change
 Name change
 Initial return
 Final return/terminated
 Amended return
 Application pending

C Name of organization **MATHEMATICAL STAIRCASE**
 Doing business as
 Number and street (or P.O. box if mail is not delivered to street address) Room/suite
231 W Franklin St
 City or town, state or province, country, and ZIP or foreign postal code
Holyoke, MA 01040

D Employer identification number
46-1813949

E Telephone number
720-771-6428

F Name and address of principal officer: **sarah-marie belcastro**
231 W Franklin St, Holyoke, MA 01040

H(a) Is this a group return for subordinates? Yes No
H(b) Are all subordinates included? Yes No
 If "No," attach a list. See instructions.
H(c) Group exemption number

G Gross receipts \$ **494,874**

I Tax-exempt status: 501(c)(3) 501(c) () (insert no.) 4947(a)(1) or 527

J Website: www.mathstaircase.org

K Form of organization: Corporation Trust Association Other **L** Year of formation: **2013** **M** State of legal domicile: **MA**

Part I Summary

Activities & Governance	1	Briefly describe the organization's mission or most significant activities: <u>To educate mathematically talented secondary and tertiary students in mathematical thinking and writing. The means of providing such education includes, but is not limited to establishing summer programs for instructing such students.</u>		
	2	Check this box <input type="checkbox"/> if the organization discontinued its operations or disposed of more than 25% of its net assets.		
	3	Number of voting members of the governing body (Part VI, line 1a)	3	5
	4	Number of independent voting members of the governing body (Part VI, line 1b)	4	3
	5	Total number of individuals employed in calendar year 2022 (Part V, line 2a)	5	3
	6	Total number of volunteers (estimate if necessary)	6	8
	7a	Total unrelated business revenue from Part VIII, column (C), line 12	7a	0
b	Net unrelated business taxable income from Form 990-T, Part I, line 11	7b	0	
Revenue	8	Contributions and grants (Part VIII, line 1h)	Prior Year 65,998	Current Year 143,485
	9	Program service revenue (Part VIII, line 2g)	156,819	351,389
	10	Investment income (Part VIII, column (A), lines 3, 4, and 7d)	0	0
	11	Other revenue (Part VIII, column (A), lines 5, 6d, 8c, 9c, 10c, and 11e)	0	0
	12	Total revenue—add lines 8 through 11 (must equal Part VIII, column (A), line 12)	222,817	494,874
Expenses	13	Grants and similar amounts paid (Part IX, column (A), lines 1–3)	0	0
	14	Benefits paid to or for members (Part IX, column (A), line 4)	0	0
	15	Salaries, other compensation, employee benefits (Part IX, column (A), lines 5–10)	62,507	69,119
	16a	Professional fundraising fees (Part IX, column (A), line 11e)	0	0
	b	Total fundraising expenses (Part IX, column (D), line 25)	0	0
	17	Other expenses (Part IX, column (A), lines 11a–11d, 11f–24e)	89,744	455,174
18	Total expenses. Add lines 13–17 (must equal Part IX, column (A), line 25)	152,251	524,293	
19	Revenue less expenses. Subtract line 18 from line 12	70,566	-29,419	
Net Assets or Fund Balances	20	Total assets (Part X, line 16)	Beginning of Current Year 225,405	End of Year 196,006
	21	Total liabilities (Part X, line 26)	0	0
	22	Net assets or fund balances. Subtract line 21 from line 20	225,405	196,006

Part II Signature Block

Under penalties of perjury, I declare that I have examined this return, including accompanying schedules and statements, and to the best of my knowledge and belief, it is true, correct, and complete. Declaration of preparer (other than officer) is based on all information of which preparer has any knowledge.

Sign Here

Signature of officer: Joan Belcastro, Treasurer Date: _____
 Type or print name and title

Paid Preparer Use Only

Print/Type preparer's name: _____ Preparer's signature: _____ Date: _____ Check if self-employed PTIN: _____
 Firm's name: _____ Firm's EIN: _____
 Firm's address: _____ Phone no.: _____

May the IRS discuss this return with the preparer shown above? See instructions Yes No

Part III Statement of Program Service Accomplishments

Check if Schedule O contains a response or note to any line in this Part III

1 Briefly describe the organization's mission:

The specific purposes for which the corporation is organized are to educate mathematically talented secondary and tertiary students in mathematical thinking and writing. The means of providing such education includes, but is not limited to, establishing residential summer programs for instructing such students.

2 Did the organization undertake any significant program services during the year which were not listed on the prior Form 990 or 990-EZ? Yes No

If "Yes," describe these new services on Schedule O.

3 Did the organization cease conducting, or make significant changes in how it conducts, any program services? Yes No

If "Yes," describe these changes on Schedule O.

4 Describe the organization's program service accomplishments for each of its three largest program services, as measured by expenses. Section 501(c)(3) and 501(c)(4) organizations are required to report the amount of grants and allocations to others, the total expenses, and revenue, if any, for each program service reported.

4a (Code:) (Expenses \$ 255,692 including grants of \$) (Revenue \$ 225,463)

MathLy: a residential summer program for mathematically gifted high-school students. Number of students enrolled was 44 in a 5-week program of courses, presentations and leisure activities. Eight trainees (staff members) also benefitted.

4b (Code:) (Expenses \$ 149,710 including grants of \$ 0) (Revenue \$ 150,830)

MathLy-Er: Similar to MathLy with slightly younger students and who are earlier in their mathematical development. Number of students enrolled was 31 in a 5-week program of courses, presentations and leisure activities. Six trainees (staff members) also benefitted.

4c (Code:) (Expenses \$ 109,169 including grants of \$ 0) (Revenue \$ 109,340)

MathLy-EST: A Research Experience for Undergraduates (REU) focused on beginning college students. Number of students enrolled was 10 in an 8-week program focused on a program of research, presentations, interactions with the MathLy students and leisure activities.

4d Other program services (Describe on Schedule O.) See Schedule O, Statement 1
(Expenses \$ 8,083 including grants of \$ 0) (Revenue \$ 7,298)

4e Total program service expenses 522,654

Part IV Checklist of Required Schedules

	Yes	No
1 Is the organization described in section 501(c)(3) or 4947(a)(1) (other than a private foundation)? <i>If "Yes," complete Schedule A</i>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2 Is the organization required to complete <i>Schedule B, Schedule of Contributors</i> ? See instructions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3 Did the organization engage in direct or indirect political campaign activities on behalf of or in opposition to candidates for public office? <i>If "Yes," complete Schedule C, Part I</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4 Section 501(c)(3) organizations. Did the organization engage in lobbying activities, or have a section 501(h) election in effect during the tax year? <i>If "Yes," complete Schedule C, Part II</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5 Is the organization a section 501(c)(4), 501(c)(5), or 501(c)(6) organization that receives membership dues, assessments, or similar amounts as defined in Rev. Proc. 98-19? <i>If "Yes," complete Schedule C, Part III</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6 Did the organization maintain any donor advised funds or any similar funds or accounts for which donors have the right to provide advice on the distribution or investment of amounts in such funds or accounts? <i>If "Yes," complete Schedule D, Part I</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7 Did the organization receive or hold a conservation easement, including easements to preserve open space, the environment, historic land areas, or historic structures? <i>If "Yes," complete Schedule D, Part II</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8 Did the organization maintain collections of works of art, historical treasures, or other similar assets? <i>If "Yes," complete Schedule D, Part III</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9 Did the organization report an amount in Part X, line 21, for escrow or custodial account liability, serve as a custodian for amounts not listed in Part X; or provide credit counseling, debt management, credit repair, or debt negotiation services? <i>If "Yes," complete Schedule D, Part IV</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10 Did the organization, directly or through a related organization, hold assets in donor-restricted endowments or in quasi endowments? <i>If "Yes," complete Schedule D, Part V</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11 If the organization's answer to any of the following questions is "Yes," then complete Schedule D, Parts VI, VII, VIII, IX, or X, as applicable.		
a Did the organization report an amount for land, buildings, and equipment in Part X, line 10? <i>If "Yes," complete Schedule D, Part VI</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b Did the organization report an amount for investments—other securities in Part X, line 12, that is 5% or more of its total assets reported in Part X, line 16? <i>If "Yes," complete Schedule D, Part VII</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c Did the organization report an amount for investments—program related in Part X, line 13, that is 5% or more of its total assets reported in Part X, line 16? <i>If "Yes," complete Schedule D, Part VIII</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d Did the organization report an amount for other assets in Part X, line 15, that is 5% or more of its total assets reported in Part X, line 16? <i>If "Yes," complete Schedule D, Part IX</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e Did the organization report an amount for other liabilities in Part X, line 25? <i>If "Yes," complete Schedule D, Part X</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f Did the organization's separate or consolidated financial statements for the tax year include a footnote that addresses the organization's liability for uncertain tax positions under FIN 48 (ASC 740)? <i>If "Yes," complete Schedule D, Part X</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12a Did the organization obtain separate, independent audited financial statements for the tax year? <i>If "Yes," complete Schedule D, Parts XI and XII</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b Was the organization included in consolidated, independent audited financial statements for the tax year? <i>If "Yes," and if the organization answered "No" to line 12a, then completing Schedule D, Parts XI and XII is optional</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13 Is the organization a school described in section 170(b)(1)(A)(ii)? <i>If "Yes," complete Schedule E</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
14a Did the organization maintain an office, employees, or agents outside of the United States?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b Did the organization have aggregate revenues or expenses of more than \$10,000 from grantmaking, fundraising, business, investment, and program service activities outside the United States, or aggregate foreign investments valued at \$100,000 or more? <i>If "Yes," complete Schedule F, Parts I and IV</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
15 Did the organization report on Part IX, column (A), line 3, more than \$5,000 of grants or other assistance to or for any foreign organization? <i>If "Yes," complete Schedule F, Parts II and IV</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
16 Did the organization report on Part IX, column (A), line 3, more than \$5,000 of aggregate grants or other assistance to or for foreign individuals? <i>If "Yes," complete Schedule F, Parts III and IV</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
17 Did the organization report a total of more than \$15,000 of expenses for professional fundraising services on Part IX, column (A), lines 6 and 11e? <i>If "Yes," complete Schedule G, Part I. See instructions</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
18 Did the organization report more than \$15,000 total of fundraising event gross income and contributions on Part VIII, lines 1c and 8a? <i>If "Yes," complete Schedule G, Part II</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
19 Did the organization report more than \$15,000 of gross income from gaming activities on Part VIII, line 9a? <i>If "Yes," complete Schedule G, Part III</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
20a Did the organization operate one or more hospital facilities? <i>If "Yes," complete Schedule H</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b If "Yes" to line 20a, did the organization attach a copy of its audited financial statements to this return?	<input type="checkbox"/>	<input type="checkbox"/>
21 Did the organization report more than \$5,000 of grants or other assistance to any domestic organization or domestic government on Part IX, column (A), line 1? <i>If "Yes," complete Schedule I, Parts I and II</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Part IV Checklist of Required Schedules *(continued)*

	Yes	No
22 Did the organization report more than \$5,000 of grants or other assistance to or for domestic individuals on Part IX, column (A), line 2? <i>If "Yes," complete Schedule I, Parts I and III</i>	22	✓
23 Did the organization answer "Yes" to Part VII, Section A, line 3, 4, or 5, about compensation of the organization's current and former officers, directors, trustees, key employees, and highest compensated employees? <i>If "Yes," complete Schedule J</i>	23	✓
24a Did the organization have a tax-exempt bond issue with an outstanding principal amount of more than \$100,000 as of the last day of the year, that was issued after December 31, 2002? <i>If "Yes," answer lines 24b through 24d and complete Schedule K. If "No," go to line 25a</i>	24a	✓
b Did the organization invest any proceeds of tax-exempt bonds beyond a temporary period exception?	24b	
c Did the organization maintain an escrow account other than a refunding escrow at any time during the year to defease any tax-exempt bonds?	24c	
d Did the organization act as an "on behalf of" issuer for bonds outstanding at any time during the year?	24d	
25a Section 501(c)(3), 501(c)(4), and 501(c)(29) organizations. Did the organization engage in an excess benefit transaction with a disqualified person during the year? <i>If "Yes," complete Schedule L, Part I</i>	25a	✓
b Is the organization aware that it engaged in an excess benefit transaction with a disqualified person in a prior year, and that the transaction has not been reported on any of the organization's prior Forms 990 or 990-EZ? <i>If "Yes," complete Schedule L, Part I</i>	25b	✓
26 Did the organization report any amount on Part X, line 5 or 22, for receivables from or payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons? <i>If "Yes," complete Schedule L, Part II</i>	26	✓
27 Did the organization provide a grant or other assistance to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor or employee thereof, a grant selection committee member, or to a 35% controlled entity (including an employee thereof) or family member of any of these persons? <i>If "Yes," complete Schedule L, Part III</i>	27	✓
28 Was the organization a party to a business transaction with one of the following parties (see the Schedule L, Part IV, instructions for applicable filing thresholds, conditions, and exceptions):		
a A current or former officer, director, trustee, key employee, creator or founder, or substantial contributor? <i>If "Yes," complete Schedule L, Part IV</i>	28a	✓
b A family member of any individual described in line 28a? <i>If "Yes," complete Schedule L, Part IV</i>	28b	✓
c A 35% controlled entity of one or more individuals and/or organizations described in line 28a or 28b? <i>If "Yes," complete Schedule L, Part IV</i>	28c	✓
29 Did the organization receive more than \$25,000 in non-cash contributions? <i>If "Yes," complete Schedule M</i>	29	✓
30 Did the organization receive contributions of art, historical treasures, or other similar assets, or qualified conservation contributions? <i>If "Yes," complete Schedule M</i>	30	✓
31 Did the organization liquidate, terminate, or dissolve and cease operations? <i>If "Yes," complete Schedule N, Part I</i>	31	✓
32 Did the organization sell, exchange, dispose of, or transfer more than 25% of its net assets? <i>If "Yes," complete Schedule N, Part II</i>	32	✓
33 Did the organization own 100% of an entity disregarded as separate from the organization under Regulations sections 301.7701-2 and 301.7701-3? <i>If "Yes," complete Schedule R, Part I</i>	33	✓
34 Was the organization related to any tax-exempt or taxable entity? <i>If "Yes," complete Schedule R, Part II, III, or IV, and Part V, line 1</i>	34	✓
35a Did the organization have a controlled entity within the meaning of section 512(b)(13)?	35a	✓
b If "Yes" to line 35a, did the organization receive any payment from or engage in any transaction with a controlled entity within the meaning of section 512(b)(13)? <i>If "Yes," complete Schedule R, Part V, line 2</i>	35b	
36 Section 501(c)(3) organizations. Did the organization make any transfers to an exempt non-charitable related organization? <i>If "Yes," complete Schedule R, Part V, line 2</i>	36	✓
37 Did the organization conduct more than 5% of its activities through an entity that is not a related organization and that is treated as a partnership for federal income tax purposes? <i>If "Yes," complete Schedule R, Part VI</i>	37	✓
38 Did the organization complete Schedule O and provide explanations on Schedule O for Part VI, lines 11b and 19? Note: All Form 990 filers are required to complete Schedule O	38	✓

Part V Statements Regarding Other IRS Filings and Tax Compliance

Check if Schedule O contains a response or note to any line in this Part V

	Yes	No
1a Enter the number reported in box 3 of Form 1096. Enter -0- if not applicable	1a	31
b Enter the number of Forms W-2G included on line 1a. Enter -0- if not applicable	1b	0
c Did the organization comply with backup withholding rules for reportable payments to vendors and reportable gaming (gambling) winnings to prize winners?	1c	

Part V Statements Regarding Other IRS Filings and Tax Compliance <i>(continued)</i>			Yes	No
2a	Enter the number of employees reported on Form W-3, Transmittal of Wage and Tax Statements, filed for the calendar year ending with or within the year covered by this return	2a <input type="text" value="3"/>		
b	If at least one is reported on line 2a, did the organization file all required federal employment tax returns?		<input checked="" type="checkbox"/>	
3a	Did the organization have unrelated business gross income of \$1,000 or more during the year?			<input checked="" type="checkbox"/>
b	If "Yes," has it filed a Form 990-T for this year? <i>If "No" to line 3b, provide an explanation on Schedule O</i>			
4a	At any time during the calendar year, did the organization have an interest in, or a signature or other authority over, a financial account in a foreign country (such as a bank account, securities account, or other financial account)?			<input checked="" type="checkbox"/>
b	If "Yes," enter the name of the foreign country _____ See instructions for filing requirements for FinCEN Form 114, Report of Foreign Bank and Financial Accounts (FBAR).			
5a	Was the organization a party to a prohibited tax shelter transaction at any time during the tax year?			<input checked="" type="checkbox"/>
b	Did any taxable party notify the organization that it was or is a party to a prohibited tax shelter transaction?			<input checked="" type="checkbox"/>
c	If "Yes" to line 5a or 5b, did the organization file Form 8886-T?			
6a	Does the organization have annual gross receipts that are normally greater than \$100,000, and did the organization solicit any contributions that were not tax deductible as charitable contributions?			<input checked="" type="checkbox"/>
b	If "Yes," did the organization include with every solicitation an express statement that such contributions or gifts were not tax deductible?			
7	Organizations that may receive deductible contributions under section 170(c).			
a	Did the organization receive a payment in excess of \$75 made partly as a contribution and partly for goods and services provided to the payor?			<input checked="" type="checkbox"/>
b	If "Yes," did the organization notify the donor of the value of the goods or services provided?			
c	Did the organization sell, exchange, or otherwise dispose of tangible personal property for which it was required to file Form 8282?			<input checked="" type="checkbox"/>
d	If "Yes," indicate the number of Forms 8282 filed during the year	7d <input type="text" value=""/>		
e	Did the organization receive any funds, directly or indirectly, to pay premiums on a personal benefit contract?			<input checked="" type="checkbox"/>
f	Did the organization, during the year, pay premiums, directly or indirectly, on a personal benefit contract?			<input checked="" type="checkbox"/>
g	If the organization received a contribution of qualified intellectual property, did the organization file Form 8899 as required?			
h	If the organization received a contribution of cars, boats, airplanes, or other vehicles, did the organization file a Form 1098-C?			
8	Sponsoring organizations maintaining donor advised funds. Did a donor advised fund maintained by the sponsoring organization have excess business holdings at any time during the year?			
9	Sponsoring organizations maintaining donor advised funds.			
a	Did the sponsoring organization make any taxable distributions under section 4966?			
b	Did the sponsoring organization make a distribution to a donor, donor advisor, or related person?			
10	Section 501(c)(7) organizations. Enter:			
a	Initiation fees and capital contributions included on Part VIII, line 12	10a <input type="text" value=""/>		
b	Gross receipts, included on Form 990, Part VIII, line 12, for public use of club facilities	10b <input type="text" value=""/>		
11	Section 501(c)(12) organizations. Enter:			
a	Gross income from members or shareholders	11a <input type="text" value=""/>		
b	Gross income from other sources. (Do not net amounts due or paid to other sources against amounts due or received from them.)	11b <input type="text" value=""/>		
12a	Section 4947(a)(1) non-exempt charitable trusts. Is the organization filing Form 990 in lieu of Form 1041?			
b	If "Yes," enter the amount of tax-exempt interest received or accrued during the year	12b <input type="text" value=""/>		
13	Section 501(c)(29) qualified nonprofit health insurance issuers.			
a	Is the organization licensed to issue qualified health plans in more than one state? Note: See the instructions for additional information the organization must report on Schedule O.			
b	Enter the amount of reserves the organization is required to maintain by the states in which the organization is licensed to issue qualified health plans	13b <input type="text" value=""/>		
c	Enter the amount of reserves on hand	13c <input type="text" value=""/>		
14a	Did the organization receive any payments for indoor tanning services during the tax year?			<input checked="" type="checkbox"/>
b	If "Yes," has it filed a Form 720 to report these payments? <i>If "No," provide an explanation on Schedule O</i>			
15	Is the organization subject to the section 4960 tax on payment(s) of more than \$1,000,000 in remuneration or excess parachute payment(s) during the year? If "Yes," see the instructions and file Form 4720, Schedule N.			<input checked="" type="checkbox"/>
16	Is the organization an educational institution subject to the section 4968 excise tax on net investment income? If "Yes," complete Form 4720, Schedule O.			<input checked="" type="checkbox"/>
17	Section 501(c)(21) organizations. Did the trust, or any disqualified or other person engage in any activities that would result in the imposition of an excise tax under section 4951, 4952, or 4953? If "Yes," complete Form 6069.			

Part VI Governance, Management, and Disclosure. For each "Yes" response to lines 2 through 7b below, and for a "No" response to line 8a, 8b, or 10b below, describe the circumstances, processes, or changes on Schedule O. See instructions. Check if Schedule O contains a response or note to any line in this Part VI

Section A. Governing Body and Management

		Yes	No
1a	Enter the number of voting members of the governing body at the end of the tax year If there are material differences in voting rights among members of the governing body, or if the governing body delegated broad authority to an executive committee or similar committee, explain on Schedule O.		
	1a 5		
b	Enter the number of voting members included on line 1a, above, who are independent		
	1b 3		
2	Did any officer, director, trustee, or key employee have a family relationship or a business relationship with any other officer, director, trustee, or key employee?	<input checked="" type="checkbox"/>	
3	Did the organization delegate control over management duties customarily performed by or under the direct supervision of officers, directors, trustees, or key employees to a management company or other person?		<input checked="" type="checkbox"/>
4	Did the organization make any significant changes to its governing documents since the prior Form 990 was filed?		<input checked="" type="checkbox"/>
5	Did the organization become aware during the year of a significant diversion of the organization's assets?		<input checked="" type="checkbox"/>
6	Did the organization have members or stockholders?		<input checked="" type="checkbox"/>
7a	Did the organization have members, stockholders, or other persons who had the power to elect or appoint one or more members of the governing body?		<input checked="" type="checkbox"/>
b	Are any governance decisions of the organization reserved to (or subject to approval by) members, stockholders, or persons other than the governing body?		<input checked="" type="checkbox"/>
8	Did the organization contemporaneously document the meetings held or written actions undertaken during the year by the following:		
a	The governing body?	<input checked="" type="checkbox"/>	
b	Each committee with authority to act on behalf of the governing body?	<input checked="" type="checkbox"/>	
9	Is there any officer, director, trustee, or key employee listed in Part VII, Section A, who cannot be reached at the organization's mailing address? If "Yes," provide the names and addresses on Schedule O	<input checked="" type="checkbox"/>	

Section B. Policies (This Section B requests information about policies not required by the Internal Revenue Code.)

		Yes	No
10a	Did the organization have local chapters, branches, or affiliates?		<input checked="" type="checkbox"/>
b	If "Yes," did the organization have written policies and procedures governing the activities of such chapters, affiliates, and branches to ensure their operations are consistent with the organization's exempt purposes?		
11a	Has the organization provided a complete copy of this Form 990 to all members of its governing body before filing the form?		<input checked="" type="checkbox"/>
b	Describe on Schedule O the process, if any, used by the organization to review this Form 990.		
12a	Did the organization have a written conflict of interest policy? If "No," go to line 13	<input checked="" type="checkbox"/>	
b	Were officers, directors, or trustees, and key employees required to disclose annually interests that could give rise to conflicts?	<input checked="" type="checkbox"/>	
c	Did the organization regularly and consistently monitor and enforce compliance with the policy? If "Yes," describe on Schedule O how this was done	<input checked="" type="checkbox"/>	
13	Did the organization have a written whistleblower policy?	<input checked="" type="checkbox"/>	
14	Did the organization have a written document retention and destruction policy?	<input checked="" type="checkbox"/>	
15	Did the process for determining compensation of the following persons include a review and approval by independent persons, comparability data, and contemporaneous substantiation of the deliberation and decision?		
a	The organization's CEO, Executive Director, or top management official		<input checked="" type="checkbox"/>
b	Other officers or key employees of the organization		<input checked="" type="checkbox"/>
	If "Yes" to line 15a or 15b, describe the process on Schedule O. See instructions.		
16a	Did the organization invest in, contribute assets to, or participate in a joint venture or similar arrangement with a taxable entity during the year?		<input checked="" type="checkbox"/>
b	If "Yes," did the organization follow a written policy or procedure requiring the organization to evaluate its participation in joint venture arrangements under applicable federal tax law, and take steps to safeguard the organization's exempt status with respect to such arrangements?		

Section C. Disclosure

- 17** List the states with which a copy of this Form 990 is required to be filed MA
- 18** Section 6104 requires an organization to make its Forms 1023 (1024 or 1024-A, if applicable), 990, and 990-T (section 501(c)(3)s only) available for public inspection. Indicate how you made these available. Check all that apply.
 Own website Another's website Upon request Other (explain on Schedule O)
- 19** Describe on Schedule O whether (and if so, how) the organization made its governing documents, conflict of interest policy, and financial statements available to the public during the tax year.
- 20** State the name, address, and telephone number of the person who possesses the organization's books and records.

sarah-marie belcastro PhD, (413)341-1373
 231 W Franklin St, Holyoke, MA 01040

Part VII Compensation of Officers, Directors, Trustees, Key Employees, Highest Compensated Employees, and Independent Contractors

Check if Schedule O contains a response or note to any line in this Part VII

Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees

1a Complete this table for all persons required to be listed. Report compensation for the calendar year ending with or within the organization's tax year.

- List all of the organization's **current** officers, directors, trustees (whether individuals or organizations), regardless of amount of compensation. Enter -0- in columns (D), (E), and (F) if no compensation was paid.
- List all of the organization's **current** key employees, if any. See the instructions for definition of "key employee."
- List the organization's five **current** highest compensated employees (other than an officer, director, trustee, or key employee) who received reportable compensation (box 5 of Form W-2, box 6 of Form 1099-MISC, and/or box 1 of Form 1099-NEC) of more than \$100,000 from the organization and any related organizations.
- List all of the organization's **former** officers, key employees, and highest compensated employees who received more than \$100,000 of reportable compensation from the organization and any related organizations.
- List all of the organization's **former directors or trustees** that received, in the capacity as a former director or trustee of the organization, more than \$10,000 of reportable compensation from the organization and any related organizations.

See the instructions for the order in which to list the persons above.

Check this box if neither the organization nor any related organization compensated any current officer, director, or trustee.

(A) Name and title	(B) Average hours per week (list any hours for related organizations below dotted line)	(C) Position (do not check more than one box, unless person is both an officer and a director/trustee)						(D) Reportable compensation from the organization (W-2/1099-MISC/1099-NEC)	(E) Reportable compensation from related organizations (W-2/1099-MISC/1099-NEC)	(F) Estimated amount of other compensation from the organization and related organizations
		Individual trustee or director	Institutional trustee	Officer	Key employee	Highest compensated employee	Former			
<u>sarah-marie belcastro PhD</u> ----- President and Chair of the Board	<u>14.00</u> ----- 0.00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				39,114	0	0
<u>Hannah Alpert PhD</u> ----- Clerk and Secretary of the Board	<u>2.00</u> ----- 0.00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				4,328	0	0
<u>Emily Peters PhD</u> ----- Director	<u>1.00</u> ----- 0.00	<input checked="" type="checkbox"/>						0	0	0
<u>Joan Belcastro</u> ----- Treasurer	<u>2.00</u> ----- 0.00	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>				0	0	0
<u>Joshua Greene PhD</u> ----- Director	<u>0.50</u> ----- 0.00	<input checked="" type="checkbox"/>						0	0	0
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Part VII Section A. Officers, Directors, Trustees, Key Employees, and Highest Compensated Employees (continued)

Table with 6 main columns: (A) Name and title, (B) Average hours per week, (C) Position (Individual trustee or director, Institutional trustee, Officer, Key employee, Highest compensated employee, Former), (D) Reportable compensation from the organization, (E) Reportable compensation from related organizations, (F) Estimated amount of other compensation. Includes subtotal rows for 1b, 1c, and 1d.

2 Total number of individuals (including but not limited to those listed above) who received more than \$100,000 of reportable compensation from the organization 0

Table with 3 columns: Question number, Question text, Yes/No columns. Contains questions 3, 4, and 5 regarding compensation reporting.

Section B. Independent Contractors

1 Complete this table for your five highest compensated independent contractors that received more than \$100,000 of compensation from the organization. Report compensation for the calendar year ending with or within the organization's tax year.

Table with 3 columns: (A) Name and business address, (B) Description of services, (C) Compensation. Includes a 'None' row.

2 Total number of independent contractors (including but not limited to those listed above) who received more than \$100,000 of compensation from the organization 0

Part VIII Statement of Revenue

Check if Schedule O contains a response or note to any line in this Part VIII

			(A) Total revenue	(B) Related or exempt function revenue	(C) Unrelated business revenue	(D) Revenue excluded from tax under sections 512-514	
Contributions, Gifts, Grants, and Other Similar Amounts	1a	Federated campaigns	1a 0				
	b	Membership dues	1b 0				
	c	Fundraising events	1c 0				
	d	Related organizations	1d 0				
	e	Government grants (contributions)	1e 120,099				
	f	All other contributions, gifts, grants, and similar amounts not included above	1f 23,386				
	g	Noncash contributions included in lines 1a-1f	1g \$ 0				
	h	Total. Add lines 1a-1f		143,485			
	Program Service Revenue			Business Code			
2a		MathLy Student Fees	611699	196,260	196,260	0	
b		MathLy-Er Student Fees	611699	147,830	147,830	0	
c		FaBraC Student Fees	611699	7,299	7,299	0	
d							
e							
f		All other program service revenue . .		0	0	0	
g		Total. Add lines 2a-2f		351,389			
Other Revenue	3	Investment income (including dividends, interest, and other similar amounts)		0	0	0	
	4	Income from investment of tax-exempt bond proceeds		0	0	0	
	5	Royalties		0	0	0	
	6a	Gross rents	(i) Real				
			(ii) Personal				
			6a				
	b	Less: rental expenses	6b				
	c	Rental income or (loss)	6c	0	0		
	d	Net rental income or (loss)					
	7a	Gross amount from sales of assets other than inventory	(i) Securities				
			(ii) Other				
			7a				
	b	Less: cost or other basis and sales expenses	7b				
	c	Gain or (loss)	7c	0	0		
	d	Net gain or (loss)					
	8a	Gross income from fundraising events (not including \$ 0 of contributions reported on line 1c). See Part IV, line 18	8a				
	b	Less: direct expenses	8b				
	c	Net income or (loss) from fundraising events					
9a	Gross income from gaming activities. See Part IV, line 19						
		9a					
b	Less: direct expenses	9b					
c	Net income or (loss) from gaming activities						
10a	Gross sales of inventory, less returns and allowances						
		10a					
b	Less: cost of goods sold	10b					
c	Net income or (loss) from sales of inventory						
Miscellaneous Revenue			Business Code				
	11a						
	b						
	c						
	d	All other revenue					
e	Total. Add lines 11a-11d		0				
12	Total revenue. See instructions		494,874	351,389	0	0	

Part IX Statement of Functional Expenses

Section 501(c)(3) and 501(c)(4) organizations must complete all columns. All other organizations must complete column (A).

Check if Schedule O contains a response or note to any line in this Part IX

Do not include amounts reported on lines 6b, 7b, 8b, 9b, and 10b of Part VIII.

	(A) Total expenses	(B) Program service expenses	(C) Management and general expenses	(D) Fundraising expenses
1 Grants and other assistance to domestic organizations and domestic governments. See Part IV, line 21	0	0		
2 Grants and other assistance to domestic individuals. See Part IV, line 22	0	0		
3 Grants and other assistance to foreign organizations, foreign governments, and foreign individuals. See Part IV, lines 15 and 16	0	0		
4 Benefits paid to or for members	0	0		
5 Compensation of current officers, directors, trustees, and key employees	43,442	43,442	0	0
6 Compensation not included above to disqualified persons (as defined under section 4958(f)(1)) and persons described in section 4958(c)(3)(B)	0	0	0	0
7 Other salaries and wages	21,374	21,374	0	0
8 Pension plan accruals and contributions (include section 401(k) and 403(b) employer contributions)	0	0	0	0
9 Other employee benefits	0	0	0	0
10 Payroll taxes	4,303	4,303	0	0
11 Fees for services (nonemployees):				
a Management	0	0	0	0
b Legal	0	0	0	0
c Accounting	1,040	0	1,040	0
d Lobbying	0	0	0	0
e Professional fundraising services. See Part IV, line 17	0			0
f Investment management fees	0	0	0	0
g Other. (If line 11g amount exceeds 10% of line 25, column (A), amount, list line 11g expenses on Schedule O.)	0	0	0	0
12 Advertising and promotion	100	100	0	0
13 Office expenses	8,066	7,467	599	
14 Information technology	0	0	0	0
15 Royalties	0	0	0	0
16 Occupancy	0	0	0	0
17 Travel	17,380	17,380	0	0
18 Payments of travel or entertainment expenses for any federal, state, or local public officials	0	0	0	0
19 Conferences, conventions, and meetings	0	0	0	0
20 Interest	0	0	0	0
21 Payments to affiliates	0	0	0	0
22 Depreciation, depletion, and amortization	0	0	0	0
23 Insurance	5,021	5,021		
24 Other expenses. Itemize expenses not covered above. (List miscellaneous expenses on line 24e. If line 24e amount exceeds 10% of line 25, column (A), amount, list line 24e expenses on Schedule O.)				
a <u>Facilities</u>	304,018	304,018	0	0
b <u>Contracted Services</u>	70,364	70,364	0	0
c <u>REU Stipends</u>	48,000	48,000	0	0
d <u>Background checks</u>	1,185	1,185	0	0
e All other expenses				
25 Total functional expenses. Add lines 1 through 24e	524,293	522,654	1,639	0
26 Joint costs. Complete this line only if the organization reported in column (B) joint costs from a combined educational campaign and fundraising solicitation. Check here <input type="checkbox"/> if following SOP 98-2 (ASC 958-720)				

Part X Balance Sheet

Check if Schedule O contains a response or note to any line in this Part X

		(A) Beginning of year		(B) End of year
Assets	1 Cash—non-interest-bearing	225,405	1	196,006
	2 Savings and temporary cash investments	0	2	0
	3 Pledges and grants receivable, net	0	3	0
	4 Accounts receivable, net	0	4	0
	5 Loans and other receivables from any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons	0	5	0
	6 Loans and other receivables from other disqualified persons (as defined under section 4958(f)(1)), and persons described in section 4958(c)(3)(B)	0	6	0
	7 Notes and loans receivable, net	0	7	0
	8 Inventories for sale or use	0	8	0
	9 Prepaid expenses and deferred charges	0	9	0
	10a Land, buildings, and equipment: cost or other basis. Complete Part VI of Schedule D	10a		
	b Less: accumulated depreciation	10b		10c
	11 Investments—publicly traded securities	0	11	0
	12 Investments—other securities. See Part IV, line 11	0	12	0
	13 Investments—program-related. See Part IV, line 11	0	13	0
	14 Intangible assets	0	14	0
	15 Other assets. See Part IV, line 11	0	15	0
16 Total assets. Add lines 1 through 15 (must equal line 33)	225,405	16	196,006	
Liabilities	17 Accounts payable and accrued expenses	0	17	0
	18 Grants payable	0	18	0
	19 Deferred revenue	0	19	0
	20 Tax-exempt bond liabilities	0	20	0
	21 Escrow or custodial account liability. Complete Part IV of Schedule D	0	21	0
	22 Loans and other payables to any current or former officer, director, trustee, key employee, creator or founder, substantial contributor, or 35% controlled entity or family member of any of these persons	0	22	0
	23 Secured mortgages and notes payable to unrelated third parties	0	23	0
	24 Unsecured notes and loans payable to unrelated third parties	0	24	0
	25 Other liabilities (including federal income tax, payables to related third parties, and other liabilities not included on lines 17–24). Complete Part X of Schedule D		25	
	26 Total liabilities. Add lines 17 through 25	0	26	0
Net Assets or Fund Balances	Organizations that follow FASB ASC 958, check here <input checked="" type="checkbox"/> and complete lines 27, 28, 32, and 33.			
	27 Net assets without donor restrictions	225,405	27	196,006
	28 Net assets with donor restrictions	0	28	0
	Organizations that do not follow FASB ASC 958, check here <input type="checkbox"/> and complete lines 29 through 33.			
	29 Capital stock or trust principal, or current funds		29	
	30 Paid-in or capital surplus, or land, building, or equipment fund		30	
	31 Retained earnings, endowment, accumulated income, or other funds		31	
	32 Total net assets or fund balances	225,405	32	196,006
33 Total liabilities and net assets/fund balances	225,405	33	196,006	

Part XI Reconciliation of Net Assets

Check if Schedule O contains a response or note to any line in this Part XI

1	Total revenue (must equal Part VIII, column (A), line 12)	1	494,874
2	Total expenses (must equal Part IX, column (A), line 25)	2	524,293
3	Revenue less expenses. Subtract line 2 from line 1	3	-29,419
4	Net assets or fund balances at beginning of year (must equal Part X, line 32, column (A))	4	225,405
5	Net unrealized gains (losses) on investments	5	0
6	Donated services and use of facilities	6	0
7	Investment expenses	7	0
8	Prior period adjustments	8	20
9	Other changes in net assets or fund balances (explain on Schedule O)	9	0
10	Net assets or fund balances at end of year. Combine lines 3 through 9 (must equal Part X, line 32, column (B))	10	196,006

Part XII Financial Statements and Reporting

Check if Schedule O contains a response or note to any line in this Part XII

	Yes	No
1 Accounting method used to prepare the Form 990: <input checked="" type="checkbox"/> Cash <input type="checkbox"/> Accrual <input type="checkbox"/> Other _____ If the organization changed its method of accounting from a prior year or checked "Other," explain on Schedule O.		
2a Were the organization's financial statements compiled or reviewed by an independent accountant? . . . If "Yes," check a box below to indicate whether the financial statements for the year were compiled or reviewed on a separate basis, consolidated basis, or both: <input checked="" type="checkbox"/> Separate basis <input type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis	✓	
b Were the organization's financial statements audited by an independent accountant? If "Yes," check a box below to indicate whether the financial statements for the year were audited on a separate basis, consolidated basis, or both: <input type="checkbox"/> Separate basis <input type="checkbox"/> Consolidated basis <input type="checkbox"/> Both consolidated and separate basis		✓
c If "Yes" to line 2a or 2b, does the organization have a committee that assumes responsibility for oversight of the audit, review, or compilation of its financial statements and selection of an independent accountant? . . . If the organization changed either its oversight process or selection process during the tax year, explain on Schedule O.	✓	
3a As a result of a federal award, was the organization required to undergo an audit or audits as set forth in the Uniform Guidance, 2 C.F.R. Part 200, Subpart F?		✓
b If "Yes," did the organization undergo the required audit or audits? If the organization did not undergo the required audit or audits, explain why on Schedule O and describe any steps taken to undergo such audits .		

**SCHEDULE A
(Form 990)**

Department of the Treasury
Internal Revenue Service

Public Charity Status and Public Support

Complete if the organization is a section 501(c)(3) organization or a section 4947(a)(1) nonexempt charitable trust.

Attach to Form 990 or Form 990-EZ.

Go to www.irs.gov/Form990 for instructions and the latest information.

OMB No. 1545-0047

2022

**Open to Public
Inspection**

Name of the organization MATHEMATICAL STAIRCASE	Employer identification number 46-1813949
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Part I Reason for Public Charity Status. (All organizations must complete this part.) See instructions.

The organization is not a private foundation because it is: (For lines 1 through 12, check only one box.)

- 1 A church, convention of churches, or association of churches described in **section 170(b)(1)(A)(i)**.
- 2 A school described in **section 170(b)(1)(A)(ii)**. (Attach Schedule E (Form 990).)
- 3 A hospital or a cooperative hospital service organization described in **section 170(b)(1)(A)(iii)**.
- 4 A medical research organization operated in conjunction with a hospital described in **section 170(b)(1)(A)(iii)**. Enter the hospital's name, city, and state:
- 5 An organization operated for the benefit of a college or university owned or operated by a governmental unit described in **section 170(b)(1)(A)(iv)**. (Complete Part II.)
- 6 A federal, state, or local government or governmental unit described in **section 170(b)(1)(A)(v)**.
- 7 An organization that normally receives a substantial part of its support from a governmental unit or from the general public described in **section 170(b)(1)(A)(vi)**. (Complete Part II.)
- 8 A community trust described in **section 170(b)(1)(A)(vii)**. (Complete Part II.)
- 9 An agricultural research organization described in **section 170(b)(1)(A)(ix)** operated in conjunction with a land-grant college or university or a non-land-grant college of agriculture (see instructions). Enter the name, city, and state of the college or university:
- 10 An organization that normally receives (1) more than 33¹/₃% of its support from contributions, membership fees, and gross receipts from activities related to its exempt functions, subject to certain exceptions; and (2) no more than 33¹/₃% of its support from gross investment income and unrelated business taxable income (less section 511 tax) from businesses acquired by the organization after June 30, 1975. See **section 509(a)(2)**. (Complete Part III.)
- 11 An organization organized and operated exclusively to test for public safety. See **section 509(a)(4)**.
- 12 An organization organized and operated exclusively for the benefit of, to perform the functions of, or to carry out the purposes of one or more publicly supported organizations described in **section 509(a)(1)** or **section 509(a)(2)**. See **section 509(a)(3)**. Check the box on lines 12a through 12d that describes the type of supporting organization and complete lines 12e, 12f, and 12g.
 - a **Type I.** A supporting organization operated, supervised, or controlled by its supported organization(s), typically by giving the supported organization(s) the power to regularly appoint or elect a majority of the directors or trustees of the supporting organization. **You must complete Part IV, Sections A and B.**
 - b **Type II.** A supporting organization supervised or controlled in connection with its supported organization(s), by having control or management of the supporting organization vested in the same persons that control or manage the supported organization(s). **You must complete Part IV, Sections A and C.**
 - c **Type III functionally integrated.** A supporting organization operated in connection with, and functionally integrated with, its supported organization(s) (see instructions). **You must complete Part IV, Sections A, D, and E.**
 - d **Type III non-functionally integrated.** A supporting organization operated in connection with its supported organization(s) that is not functionally integrated. The organization generally must satisfy a distribution requirement and an attentiveness requirement (see instructions). **You must complete Part IV, Sections A and D, and Part V.**
 - e Check this box if the organization received a written determination from the IRS that it is a Type I, Type II, Type III functionally integrated, or Type III non-functionally integrated supporting organization.
 - f Enter the number of supported organizations
 - g Provide the following information about the supported organization(s).

(i) Name of supported organization	(ii) EIN	(iii) Type of organization (described on lines 1-10 above (see instructions))	(iv) Is the organization listed in your governing document?		(v) Amount of monetary support (see instructions)	(vi) Amount of other support (see instructions)
			Yes	No		
(A)						
(B)						
(C)						
(D)						
(E)						
Total						

Part II Support Schedule for Organizations Described in Sections 170(b)(1)(A)(iv) and 170(b)(1)(A)(vi)

(Complete only if you checked the box on line 5, 7, or 8 of Part I or if the organization failed to qualify under Part III. If the organization fails to qualify under the tests listed below, please complete Part III.)

Section A. Public Support

Calendar year (or fiscal year beginning in)	(a) 2018	(b) 2019	(c) 2020	(d) 2021	(e) 2022	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")						
2 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf						
3 The value of services or facilities furnished by a governmental unit to the organization without charge						
4 Total. Add lines 1 through 3						
5 The portion of total contributions by each person (other than a governmental unit or publicly supported organization) included on line 1 that exceeds 2% of the amount shown on line 11, column (f)						
6 Public support. Subtract line 5 from line 4						

Section B. Total Support

Calendar year (or fiscal year beginning in)	(a) 2018	(b) 2019	(c) 2020	(d) 2021	(e) 2022	(f) Total
7 Amounts from line 4						
8 Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources						
9 Net income from unrelated business activities, whether or not the business is regularly carried on						
10 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)						
11 Total support. Add lines 7 through 10						
12 Gross receipts from related activities, etc. (see instructions)					12	
13 First 5 years. If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and stop here						<input type="checkbox"/>

Section C. Computation of Public Support Percentage

14 Public support percentage for 2022 (line 6, column (f), divided by line 11, column (f))	14	%
15 Public support percentage from 2021 Schedule A, Part II, line 14	15	%
16a 33 1/3% support test—2022. If the organization did not check the box on line 13, and line 14 is 33 1/3% or more, check this box and stop here . The organization qualifies as a publicly supported organization		<input type="checkbox"/>
b 33 1/3% support test—2021. If the organization did not check a box on line 13 or 16a, and line 15 is 33 1/3% or more, check this box and stop here . The organization qualifies as a publicly supported organization		<input type="checkbox"/>
17a 10%-facts-and-circumstances test—2022. If the organization did not check a box on line 13, 16a, or 16b, and line 14 is 10% or more, and if the organization meets the facts-and-circumstances test, check this box and stop here . Explain in Part VI how the organization meets the facts-and-circumstances test. The organization qualifies as a publicly supported organization		<input type="checkbox"/>
b 10%-facts-and-circumstances test—2021. If the organization did not check a box on line 13, 16a, 16b, or 17a, and line 15 is 10% or more, and if the organization meets the facts-and-circumstances test, check this box and stop here . Explain in Part VI how the organization meets the facts-and-circumstances test. The organization qualifies as a publicly supported organization		<input type="checkbox"/>
18 Private foundation. If the organization did not check a box on line 13, 16a, 16b, 17a, or 17b, check this box and see instructions		<input type="checkbox"/>

Part III Support Schedule for Organizations Described in Section 509(a)(2)

(Complete only if you checked the box on line 10 of Part I or if the organization failed to qualify under Part II. If the organization fails to qualify under the tests listed below, please complete Part II.)

Section A. Public Support

Calendar year (or fiscal year beginning in)	(a) 2018	(b) 2019	(c) 2020	(d) 2021	(e) 2022	(f) Total
1 Gifts, grants, contributions, and membership fees received. (Do not include any "unusual grants.")	17,204	68,530	53,374	65,997	143,485	348,590
2 Gross receipts from admissions, merchandise sold or services performed, or facilities furnished in any activity that is related to the organization's tax-exempt purpose	304,479	276,403	142,125	156,819	351,389	1,231,215
3 Gross receipts from activities that are not an unrelated trade or business under section 513	0	0	0	0	0	0
4 Tax revenues levied for the organization's benefit and either paid to or expended on its behalf	0	0	0	0	0	0
5 The value of services or facilities furnished by a governmental unit to the organization without charge	0	0	0	0	0	0
6 Total. Add lines 1 through 5	321,683	344,933	195,499	222,816	494,874	1,579,805
7a Amounts included on lines 1, 2, and 3 received from disqualified persons	1,500	2,000	2,000	6,744	4,500	16,744
b Amounts included on lines 2 and 3 received from other than disqualified persons that exceed the greater of \$5,000 or 1% of the amount on line 13 for the year	0	0	0	0	0	0
c Add lines 7a and 7b	1,500	2,000	2,000	6,744	4,500	16,744
8 Public support. (Subtract line 7c from line 6.)						1,563,061

Section B. Total Support

Calendar year (or fiscal year beginning in)	(a) 2018	(b) 2019	(c) 2020	(d) 2021	(e) 2022	(f) Total
9 Amounts from line 6	321,683	344,933	195,499	222,816	494,874	1,579,805
10a Gross income from interest, dividends, payments received on securities loans, rents, royalties, and income from similar sources	0	0	0	0	0	0
b Unrelated business taxable income (less section 511 taxes) from businesses acquired after June 30, 1975	0	0	0	0	0	0
c Add lines 10a and 10b	0	0	0	0	0	0
11 Net income from unrelated business activities not included on line 10b, whether or not the business is regularly carried on	0	0	0	0	0	0
12 Other income. Do not include gain or loss from the sale of capital assets (Explain in Part VI.)	0	0	0	0	0	0
13 Total support. (Add lines 9, 10c, 11, and 12.)	321,683	344,933	195,499	222,816	494,874	1,579,805
14 First 5 years. If the Form 990 is for the organization's first, second, third, fourth, or fifth tax year as a section 501(c)(3) organization, check this box and stop here <input type="checkbox"/>						

Section C. Computation of Public Support Percentage

15 Public support percentage for 2022 (line 8, column (f), divided by line 13, column (f))	15	98.94 %
16 Public support percentage from 2021 Schedule A, Part III, line 15	16	99.03 %

Section D. Computation of Investment Income Percentage

17 Investment income percentage for 2022 (line 10c, column (f), divided by line 13, column (f))	17	0 %
18 Investment income percentage from 2021 Schedule A, Part III, line 17	18	0 %
19a 33 1/3% support tests—2022. If the organization did not check the box on line 14, and line 15 is more than 33 1/3%, and line 17 is not more than 33 1/3%, check this box and stop here . The organization qualifies as a publicly supported organization	<input checked="" type="checkbox"/>	
b 33 1/3% support tests—2021. If the organization did not check a box on line 14 or line 19a, and line 16 is more than 33 1/3%, and line 18 is not more than 33 1/3%, check this box and stop here . The organization qualifies as a publicly supported organization	<input type="checkbox"/>	
20 Private foundation. If the organization did not check a box on line 14, 19a, or 19b, check this box and see instructions	<input type="checkbox"/>	

Part IV Supporting Organizations

(Complete only if you checked a box on line 12 of Part I. If you checked box 12a, Part I, complete Sections A and B. If you checked box 12b, Part I, complete Sections A and C. If you checked box 12c, Part I, complete Sections A, D, and E. If you checked box 12d, Part I, complete Sections A and D, and complete Part V.)

Section A. All Supporting Organizations

		Yes	No
1	Are all of the organization's supported organizations listed by name in the organization's governing documents? <i>If "No," describe in Part VI how the supported organizations are designated. If designated by class or purpose, describe the designation. If historic and continuing relationship, explain.</i>		
2	Did the organization have any supported organization that does not have an IRS determination of status under section 509(a)(1) or (2)? <i>If "Yes," explain in Part VI how the organization determined that the supported organization was described in section 509(a)(1) or (2).</i>		
3a	Did the organization have a supported organization described in section 501(c)(4), (5), or (6)? <i>If "Yes," answer lines 3b and 3c below.</i>		
3b	Did the organization confirm that each supported organization qualified under section 501(c)(4), (5), or (6) and satisfied the public support tests under section 509(a)(2)? <i>If "Yes," describe in Part VI when and how the organization made the determination.</i>		
3c	Did the organization ensure that all support to such organizations was used exclusively for section 170(c)(2)(B) purposes? <i>If "Yes," explain in Part VI what controls the organization put in place to ensure such use.</i>		
4a	Was any supported organization not organized in the United States ("foreign supported organization")? <i>If "Yes," and if you checked box 12a or 12b in Part I, answer lines 4b and 4c below.</i>		
4b	Did the organization have ultimate control and discretion in deciding whether to make grants to the foreign supported organization? <i>If "Yes," describe in Part VI how the organization had such control and discretion despite being controlled or supervised by or in connection with its supported organizations.</i>		
4c	Did the organization support any foreign supported organization that does not have an IRS determination under sections 501(c)(3) and 509(a)(1) or (2)? <i>If "Yes," explain in Part VI what controls the organization used to ensure that all support to the foreign supported organization was used exclusively for section 170(c)(2)(B) purposes.</i>		
5a	Did the organization add, substitute, or remove any supported organizations during the tax year? <i>If "Yes," answer lines 5b and 5c below (if applicable). Also, provide detail in Part VI, including (i) the names and EIN numbers of the supported organizations added, substituted, or removed; (ii) the reasons for each such action; (iii) the authority under the organization's organizing document authorizing such action; and (iv) how the action was accomplished (such as by amendment to the organizing document).</i>		
5b	Type I or Type II only. Was any added or substituted supported organization part of a class already designated in the organization's organizing document?		
5c	Substitutions only. Was the substitution the result of an event beyond the organization's control?		
6	Did the organization provide support (whether in the form of grants or the provision of services or facilities) to anyone other than (i) its supported organizations, (ii) individuals that are part of the charitable class benefited by one or more of its supported organizations, or (iii) other supporting organizations that also support or benefit one or more of the filing organization's supported organizations? <i>If "Yes," provide detail in Part VI.</i>		
7	Did the organization provide a grant, loan, compensation, or other similar payment to a substantial contributor (as defined in section 4958(c)(3)(C)), a family member of a substantial contributor, or a 35% controlled entity with regard to a substantial contributor? <i>If "Yes," complete Part I of Schedule L (Form 990).</i>		
8	Did the organization make a loan to a disqualified person (as defined in section 4958) not described on line 7? <i>If "Yes," complete Part I of Schedule L (Form 990).</i>		
9a	Was the organization controlled directly or indirectly at any time during the tax year by one or more disqualified persons, as defined in section 4946 (other than foundation managers and organizations described in section 509(a)(1) or (2))? <i>If "Yes," provide detail in Part VI.</i>		
9b	Did one or more disqualified persons (as defined on line 9a) hold a controlling interest in any entity in which the supporting organization had an interest? <i>If "Yes," provide detail in Part VI.</i>		
9c	Did a disqualified person (as defined on line 9a) have an ownership interest in, or derive any personal benefit from, assets in which the supporting organization also had an interest? <i>If "Yes," provide detail in Part VI.</i>		
10a	Was the organization subject to the excess business holdings rules of section 4943 because of section 4943(f) (regarding certain Type II supporting organizations, and all Type III non-functionally integrated supporting organizations)? <i>If "Yes," answer line 10b below.</i>		
10b	Did the organization have any excess business holdings in the tax year? <i>(Use Schedule C, Form 4720, to determine whether the organization had excess business holdings.)</i>		

Part IV Supporting Organizations (continued)

		Yes	No
11	Has the organization accepted a gift or contribution from any of the following persons?		
a	A person who directly or indirectly controls, either alone or together with persons described on lines 11b and 11c below, the governing body of a supported organization?		
	11a		
b	A family member of a person described on line 11a above?		
	11b		
c	A 35% controlled entity of a person described on line 11a or 11b above? If "Yes" to line 11a, 11b, or 11c, provide detail in Part VI .		
	11c		

Section B. Type I Supporting Organizations

		Yes	No
1	Did the governing body, members of the governing body, officers acting in their official capacity, or membership of one or more supported organizations have the power to regularly appoint or elect at least a majority of the organization's officers, directors, or trustees at all times during the tax year? If "No," describe in Part VI how the supported organization(s) effectively operated, supervised, or controlled the organization's activities. If the organization had more than one supported organization, describe how the powers to appoint and/or remove officers, directors, or trustees were allocated among the supported organizations and what conditions or restrictions, if any, applied to such powers during the tax year.		
	1		
2	Did the organization operate for the benefit of any supported organization other than the supported organization(s) that operated, supervised, or controlled the supporting organization? If "Yes," explain in Part VI how providing such benefit carried out the purposes of the supported organization(s) that operated, supervised, or controlled the supporting organization.		
	2		

Section C. Type II Supporting Organizations

		Yes	No
1	Were a majority of the organization's directors or trustees during the tax year also a majority of the directors or trustees of each of the organization's supported organization(s)? If "No," describe in Part VI how control or management of the supporting organization was vested in the same persons that controlled or managed the supported organization(s).		
	1		

Section D. All Type III Supporting Organizations

		Yes	No
1	Did the organization provide to each of its supported organizations, by the last day of the fifth month of the organization's tax year, (i) a written notice describing the type and amount of support provided during the prior tax year, (ii) a copy of the Form 990 that was most recently filed as of the date of notification, and (iii) copies of the organization's governing documents in effect on the date of notification, to the extent not previously provided?		
	1		
2	Were any of the organization's officers, directors, or trustees either (i) appointed or elected by the supported organization(s) or (ii) serving on the governing body of a supported organization? If "No," explain in Part VI how the organization maintained a close and continuous working relationship with the supported organization(s).		
	2		
3	By reason of the relationship described on line 2, above, did the organization's supported organizations have a significant voice in the organization's investment policies and in directing the use of the organization's income or assets at all times during the tax year? If "Yes," describe in Part VI the role the organization's supported organizations played in this regard.		
	3		

Section E. Type III Functionally Integrated Supporting Organizations

1	Check the box next to the method that the organization used to satisfy the Integral Part Test during the year (see instructions).		
a	<input type="checkbox"/> The organization satisfied the Activities Test. Complete line 2 below.		
b	<input type="checkbox"/> The organization is the parent of each of its supported organizations. Complete line 3 below.		
c	<input type="checkbox"/> The organization supported a governmental entity. Describe in Part VI how you supported a governmental entity (see instructions).		
2	Activities Test. Answer lines 2a and 2b below.		
		Yes	No
a	Did substantially all of the organization's activities during the tax year directly further the exempt purposes of the supported organization(s) to which the organization was responsive? If "Yes," then in Part VI identify those supported organizations and explain how these activities directly furthered their exempt purposes, how the organization was responsive to those supported organizations, and how the organization determined that these activities constituted substantially all of its activities.		
	2a		
b	Did the activities described on line 2a, above, constitute activities that, but for the organization's involvement, one or more of the organization's supported organization(s) would have been engaged in? If "Yes," explain in Part VI the reasons for the organization's position that its supported organization(s) would have engaged in these activities but for the organization's involvement.		
	2b		
3	Parent of Supported Organizations. Answer lines 3a and 3b below.		
a	Did the organization have the power to regularly appoint or elect a majority of the officers, directors, or trustees of each of the supported organizations? If "Yes" or "No," provide details in Part VI .		
	3a		
b	Did the organization exercise a substantial degree of direction over the policies, programs, and activities of each of its supported organizations? If "Yes," describe in Part VI the role played by the organization in this regard.		
	3b		

Part V Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations

- 1** Check here if the organization satisfied the Integral Part Test as a qualifying trust on Nov. 20, 1970 (*explain in Part VI*). **See instructions.** All other Type III non-functionally integrated supporting organizations must complete Sections A through E.

Section A—Adjusted Net Income		(A) Prior Year	(B) Current Year (optional)
1	Net short-term capital gain	1	
2	Recoveries of prior-year distributions	2	
3	Other gross income (see instructions)	3	
4	Add lines 1 through 3.	4	
5	Depreciation and depletion	5	
6	Portion of operating expenses paid or incurred for production or collection of gross income or for management, conservation, or maintenance of property held for production of income (see instructions)	6	
7	Other expenses (see instructions)	7	
8	Adjusted Net Income (subtract lines 5, 6, and 7 from line 4)	8	
Section B—Minimum Asset Amount		(A) Prior Year	(B) Current Year (optional)
1	Aggregate fair market value of all non-exempt-use assets (see instructions for short tax year or assets held for part of year):		
a	Average monthly value of securities	1a	
b	Average monthly cash balances	1b	
c	Fair market value of other non-exempt-use assets	1c	
d	Total (add lines 1a, 1b, and 1c)	1d	
e	Discount claimed for blockage or other factors (<i>explain in detail in Part VI</i>):		
2	Acquisition indebtedness applicable to non-exempt-use assets	2	
3	Subtract line 2 from line 1d.	3	
4	Cash deemed held for exempt use. Enter 0.015 of line 3 (for greater amount, see instructions).	4	
5	Net value of non-exempt-use assets (subtract line 4 from line 3)	5	
6	Multiply line 5 by 0.035.	6	
7	Recoveries of prior-year distributions	7	
8	Minimum Asset Amount (add line 7 to line 6)	8	
Section C—Distributable Amount			Current Year
1	Adjusted net income for prior year (from Section A, line 8, column A)	1	
2	Enter 0.85 of line 1.	2	
3	Minimum asset amount for prior year (from Section B, line 8, column A)	3	
4	Enter greater of line 2 or line 3.	4	
5	Income tax imposed in prior year	5	
6	Distributable Amount. Subtract line 5 from line 4, unless subject to emergency temporary reduction (see instructions).	6	
7	<input type="checkbox"/> Check here if the current year is the organization's first as a non-functionally integrated Type III supporting organization (see instructions).		

Part V Type III Non-Functionally Integrated 509(a)(3) Supporting Organizations (continued)

Section D—Distributions		Current Year
1	Amounts paid to supported organizations to accomplish exempt purposes	1
2	Amounts paid to perform activity that directly furthers exempt purposes of supported organizations, in excess of income from activity	2
3	Administrative expenses paid to accomplish exempt purposes of supported organizations	3
4	Amounts paid to acquire exempt-use assets	4
5	Qualified set-aside amounts (prior IRS approval required—provide details in Part VI)	5
6	Other distributions (describe in Part VI). See instructions.	6
7	Total annual distributions. Add lines 1 through 6.	7
8	Distributions to attentive supported organizations to which the organization is responsive (provide details in Part VI). See instructions.	8
9	Distributable amount for 2022 from Section C, line 6	9
10	Line 8 amount divided by line 9 amount	10

Section E—Distribution Allocations (see instructions)	(i) Excess Distributions	(ii) Underdistributions Pre-2022	(iii) Distributable Amount for 2022
1 Distributable amount for 2022 from Section C, line 6			
2 Underdistributions, if any, for years prior to 2022 (reasonable cause required—explain in Part VI). See instructions.			
3 Excess distributions carryover, if any, to 2022			
a From 2017			
b From 2018			
c From 2019			
d From 2020			
e From 2021			
f Total of lines 3a through 3e			
g Applied to underdistributions of prior years			
h Applied to 2022 distributable amount			
i Carryover from 2017 not applied (see instructions)			
j Remainder. Subtract lines 3g, 3h, and 3i from line 3f.			
4 Distributions for 2022 from Section D, line 7: \$			
a Applied to underdistributions of prior years			
b Applied to 2022 distributable amount			
c Remainder. Subtract lines 4a and 4b from line 4.			
5 Remaining underdistributions for years prior to 2022, if any. Subtract lines 3g and 4a from line 2. For result greater than zero, explain in Part VI . See instructions.			
6 Remaining underdistributions for 2022. Subtract lines 3h and 4b from line 1. For result greater than zero, explain in Part VI . See instructions.			
7 Excess distributions carryover to 2023. Add lines 3j and 4c.			
8 Breakdown of line 7:			
a Excess from 2018 . . .			
b Excess from 2019 . . .			
c Excess from 2020 . . .			
d Excess from 2021 . . .			
e Excess from 2022 . . .			

**SCHEDULE L
(Form 990)**

Department of the Treasury
Internal Revenue Service

Transactions With Interested Persons

Complete if the organization answered "Yes" on Form 990, Part IV, line 25a, 25b, 26, 27, 28a, 28b, or 28c, or Form 990-EZ, Part V, line 38a or 40b.

Attach to Form 990 or Form 990-EZ.

Go to www.irs.gov/Form990 for instructions and the latest information.

OMB No. 1545-0047

2022

Open To Public Inspection

Name of the organization

Employer identification number

MATHEMATICAL STAIRCASE

46-1813949

Part I Excess Benefit Transactions (section 501(c)(3), section 501(c)(4), and section 501(c)(29) organizations only).

Complete if the organization answered "Yes" on Form 990, Part IV, line 25a or 25b, or Form 990-EZ, Part V, line 40b.

1	(a) Name of disqualified person	(b) Relationship between disqualified person and organization	(c) Description of transaction	(d) Corrected?	
				Yes	No
(1)					
(2)					
(3)					
(4)					
(5)					
(6)					

2 Enter the amount of tax incurred by the organization managers or disqualified persons during the year under section 4958 \$ _____

3 Enter the amount of tax, if any, on line 2, above, reimbursed by the organization \$ _____

Part II Loans to and/or From Interested Persons.

Complete if the organization answered "Yes" on Form 990-EZ, Part V, line 38a or Form 990, Part IV, line 26; or if the organization reported an amount on Form 990, Part X, line 5, 6, or 22.

(a) Name of interested person	(b) Relationship with organization	(c) Purpose of loan	(d) Loan to or from the organization?		(e) Original principal amount	(f) Balance due	(g) In default?		(h) Approved by board or committee?		(i) Written agreement?	
			To	From			Yes	No	Yes	No	Yes	No
(1)												
(2)												
(3)												
(4)												
(5)												
(6)												
(7)												
(8)												
(9)												
(10)												
Total						\$ _____						

Part III Grants or Assistance Benefiting Interested Persons.

Complete if the organization answered "Yes" on Form 990, Part IV, line 27.

(a) Name of interested person	(b) Relationship between interested person and the organization	(c) Amount of assistance	(d) Type of assistance	(e) Purpose of assistance
(1)				
(2)				
(3)				
(4)				
(5)				
(6)				
(7)				
(8)				
(9)				
(10)				

Part IV Business Transactions Involving Interested Persons.

Complete if the organization answered "Yes" on Form 990, Part IV, line 28a, 28b, or 28c.

(a) Name of interested person	(b) Relationship between interested person and the organization	(c) Amount of transaction	(d) Description of transaction	(e) Sharing of organization's revenues?	
				Yes	No
(1) sarah-marie belcastro PhD	Family member of Joan B	39,114	See Part V		✓
(2)					
(3)					
(4)					
(5)					
(6)					
(7)					
(8)					
(9)					
(10)					

Part V Supplemental Information.

Provide additional information for responses to questions on Schedule L (see instructions).

Schedule L, Part I, Line 1 - Schedule L, Part I, Line 1, sarah-marie belcastro, PhD, President and Chair of the Board, is the daughter of Joan Belcastro, Treasurer. Neither are compensated as members of the Board of Directors or as Officers, sarah-marie belcastro was paid a total of \$39,114: \$23,292 as the employed director of the MathILy summer program, \$7,214 as an instructor in the MathILy program, \$7,200 as instructor for FaBraC, \$350 for work relating to CFDA No., 47.049, NSF REU 2019 award DMS-1851842, and \$1,058 for work related to CFDA No. 47.049, NSF REU 2022 award DMS-2149647.

**SCHEDULE O
(Form 990)**

Department of the Treasury
Internal Revenue Service

Supplemental Information to Form 990 or 990-EZ

Complete to provide information for responses to specific questions on
Form 990 or 990-EZ or to provide any additional information.

Attach to Form 990 or Form 990-EZ.

Go to www.irs.gov/Form990 for the latest information.

OMB No. 1545-0047

2022

**Open to Public
Inspection**

Name of the organization

MATHEMATICAL STAIRCASE

Employer identification number

46-1813949

Form 990, Part III, Line 2 - A new program called FaBraC, a stand-alone course offered to students who have completed the MathLy summer program and who are interested in studying additional mathematical topics.

Form 990, Part III, Line 4d - FaBraC, a stand-alone course offered to students who have completed the MathLy summer program and who are interested in studying additional mathematical topics. Eight students were enrolled.

Form 990, Part V, Line 1a - The organization files its forms 1096 through a service which files the forms 1096 electronically. The organization employs 3 people and 28 independent contractors.

Form 990, Part V, Line 2a - The organization files its forms W-2 electronically so even through there are 3 employees, there is no W-3 generated.

Form 990, Part VI, Section A, Line 1b - All members of the Board serve without compensation. However, sarah-marie belcastro, PhD, President and Chair of the Board, serves as the director of the MathLy summer program as well as serving as a lead instructor for the program. Hannah Alpert, PhD, served as an instructor in the MathLy program.

Form 990, Part VI, Section A, Line 2 - The President and Chair of the Board, sarah-marie belcastro, PhD, is the daughter of Joan Belcastro, Treasurer.

Form 990, Part VI, Section A, Line 9 - The following board members cannot be reached at the organization's address: 1) Hannah Alpert, PhD, Clerk and Secretary of the Board, 449 Harper Ave., Apt. 6, Auburn, AL, 36830 2) Joan Belcastro, Treasurer, 285 N. Grandview Ave., Dubuque, IA, 52001 3) Joshua Greene, PhD, 1 Regent Circle #3, Brookline, MA, 02445 4) Emily Peters, PhD, 646 Judson Ave., Evanston, IL, 60202.

Form 990, Part VI, Section B, Line 11b - The Treasurer prepares form 990 and accompanying schedules which are reviewed by the President and Chair of the Board and the Clerk and Secretary of the Board.

Form 990, Part VI, Section B, Line 12c - All members of the Board are aware of the family relationship between the President and Chair of the Board and the Treasurer. These two individuals must recuse themselves from discussion and voting on issues affecting the one or the other. Such discussions take place without their presence.

Form 990, Part VI, Section C, Line 19 - The organization's articles of incorporation are available for public view at the website of the Secretary of State of the Commonwealth of Massachusetts. The Bylaws of the organization are available on request from the Clerk of the corporation. The Bylaws include an extensive conflict-of-interest policy. Financial statements are available on the organization's website as well as on GuideStar as are its tax filings. Form 1023 is available upon request and the determination letter is posted on the Mathematical Staircase, Inc., website.

Form 990, Part VI, Section C, Line 20 - The organization's books and records are held by sarah-marie belcastro, PhD, 231 W. Franklin St., Holyoke, MA, 01040, tel: 413-341-1373. The Treasurer guides accounting record keeping, prepares the annual financial statements, and prepares annual federal tax filings: Joan Belcastro, 285 N. Grandview Ave., Dubuque, IA, 52001, tel: 563-588-1044. The Clerk is responsible for any corporate filings for the Commonwealth of Massachusetts, the incorporation documents, and keeps the minutes of the meetings of the Board of Directors: Hannah Alpert, PhD, 449 Harper Ave., Apt 6, Auburn, AL 36830, tel: 720-771-6428

Form 990, Part VII, Section A, Line 1a - The \$39,114 paid to sarah-marie belcastro was not for her position as President and Chair of the Board. As director of the MathLy summer program she was paid \$23,292; as an instructor she was paid \$14,414 and for work done in connection with the NSF grants she was paid \$1,407. The \$4,328 paid to Hannah Alpert was for instructional services.

Other Program Services Accomplishments

Activity Code	Description	Expense	Grants	Revenue
	FaBraC a stand-alone course offered to students who have completed the MathILy summer program and who are interested in studying additional mathematical topics. Eight students were enrolled.	8,083		7,298
Total:		8,083	0	7,298