FOOTHILL COLLEGE
Institutional Research and Planning

DATE: August 19, 2013

TO: Sarah Munoz, Instructor, Mathematics
Kathy Perino, Instructor, Mathematics
Tilly Wu, Counselor, Counseling
Peter Murray, Dean, Physical Sciences, Mathematics & Engineering

FROM: Elaine Kuo, College Researcher
Thomas Margesson, Student Assistant

RE: 2013 Summer Bridge Math Program Intake Survey-Session 2

Overview

Students participating in the second session of the Summer Bridge Math Program (August 19-August 29) were required to complete an intake survey. While there were 75 students who expressed interest in the program, only 56 students (75%) registered the first day. As the survey was required, there was a 100% response rate among the students attending the first class. Note that there was one student who previously indicated that she would miss the first class, so total participants should total 57.

Some highlights:

Student Background

- Almost two-thirds of the students enrolled in courses at Foothill prior to the program (61%). Note that some this coursework could be CNSL 5, which first-time students may have registered for during the summer.
- While roughly half of the students graduated from high school in 2013 (54%), slightly over one-third graduated in before 2011 (36%).
- Over half of the students are currently not working for pay (61%) and among those who are working, most are working a part-time job, between 1-20 hours a week (64%).

Motivation

- The majority of students reported wanting to improve their math placement test (89%) and half noted that it has been over one year since their last math class (50%).
- Almost one-third report initial anxiety about taking a math class in college (32%).

Previous Math Experience

- Almost half of the students took their last math class either this year or one year ago (54%). Algebra 2 was the most commonly reported last math taken (32%), followed by Geometry (16%) and Algebra 1 (14%). The grade received in whatever math class they last enrolled in was either a "B" or "C" (36% and 29%).
- Almost three-fourths of the students who attended the first day initially placed either into NCBS 401 (29%), Math 235 (23%) or needed to retest (20%) (Table 1).

Table 1. Summer Bridge Math Program Initial Placement (Session Two), 2013.

Course	Students	Percent
NCBS 401A	16	29%
Math 235	13	23%
Retest	11	20%
No Placement	9	16%
Math 220/217	5	9%
Math 105/108	3	5%
Total	56	100%

Math Perceptions

- Less than half of the students rated themselves "average" in terms of their overall math ability compared to the average student (43%) while almost half rated themselves as "below average" (48%), reflecting a lower math ability compared to session one students.
- When rating their confidence level, at least half students tended to select "some confidence" for each math concept, with the exception of "finding the equation for a line if you are given the graph" (55% reported "no confidence"), "working with rules of exponents (50% reported "no confidence") and "graphing a line from the equation of a line" (48% reported "no confidence").
- Math concepts where few students indicated confidence include: "Finding the slope of a line" (11%), "Graphing a line from the equation of a line" (11%), "Finding the equation of a line if you are given the graph" (7%), and "Working with rules of exponents" (4%).
- Math concepts where more students indicated confidence include: "Adding or subtracting fractions without a calculator" (43%) and "Solving equations for x" (36%).

Future Plans

- Only one student reported not planning to enroll at Foothill in the fall (2%). Two-thirds indicated they planned to enroll in 2 or 3 classes (66%).

Methodology

Students who attended the first day of Summer Bridge were required to fill out the intake survey as their first activity. Data was collected using ReMark survey software.

Source

Summer Bridge Intake Survey

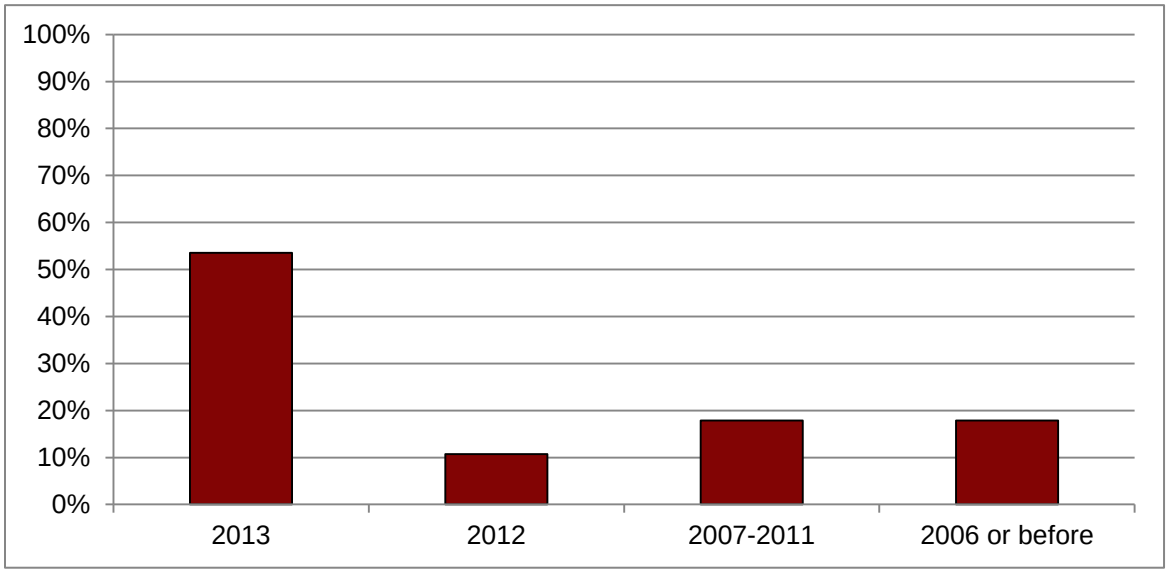
Q4. Which high school did you attend?

Response	N	%
Mountain View High	5	9%
Woodside High	3	5%
Cupertino High	2	4%
Del Mar High	2	4%
Fremont High	2	4%
Henry M. Gunn High	2	4%
Homestead High	2	4%
Menlo-Atherton High	2	4%
San Jose High	2	4%
Santa Clara High	2	4%
Westmont High	2	4%
Abraham Lincoln High	1	2%
Aragon High	1	2%
Carlmont High	1	2%
Los Altos High	1	2%
Los Gatos High	1	2%
Lynbrook High	1	2%
Palo Alto High	1	2%
Pioneer High	1	2%
Saint Francis	1	2%
Willow Glen High	1	2%
Other	20	36%
Total	56	100%

NOTE: Other responses includes: East Palo Alto Acadamy (x2), Gahanna Lincoln, Gimnasio Jean Piaget del Caribe, Groupe Scolaire Delta Le Bambino, Gunderson High, Home School (x2), Joseph A. Gregori HS, Julia Richman, Libertyville High School, Newark Memorial Hish School, Pinnacle High School, Redwood High School, Riverwood High School, SMK SU, West Valley/Hemet High/Allesandro (Hemet, CA), an unamed high school in San Carlos, and an unamed high school in an unnamed country.

Q5. When did you graduate high school?

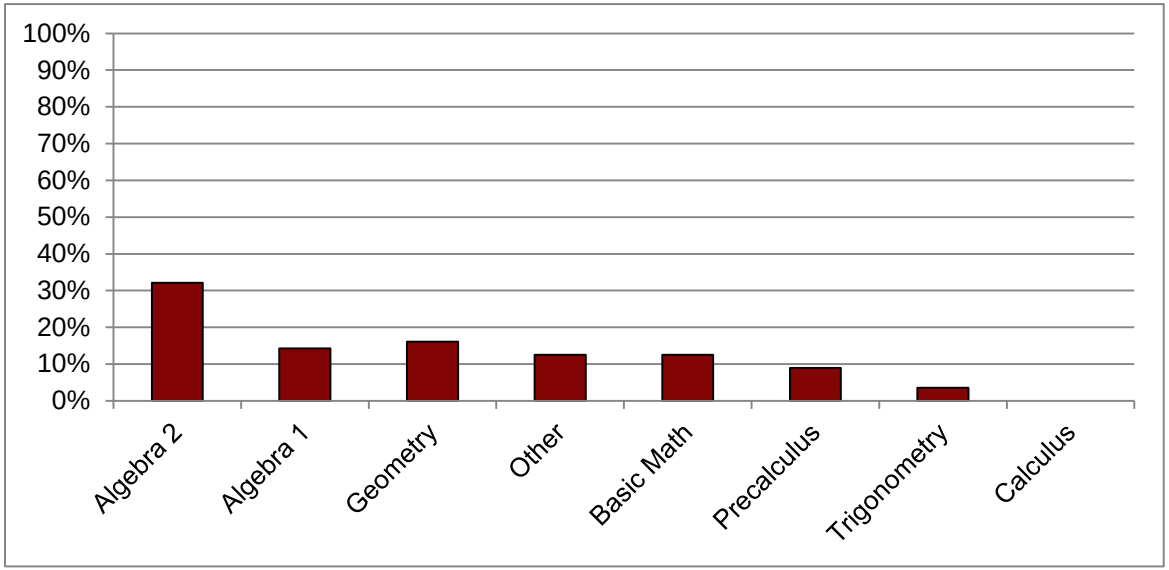
Response	N	%
2013	30	54%
2012	6	11%
2007-2011	10	18%
2006 or before	10	18%
Total	56	100%



Q6. What is the last math class you have taken?

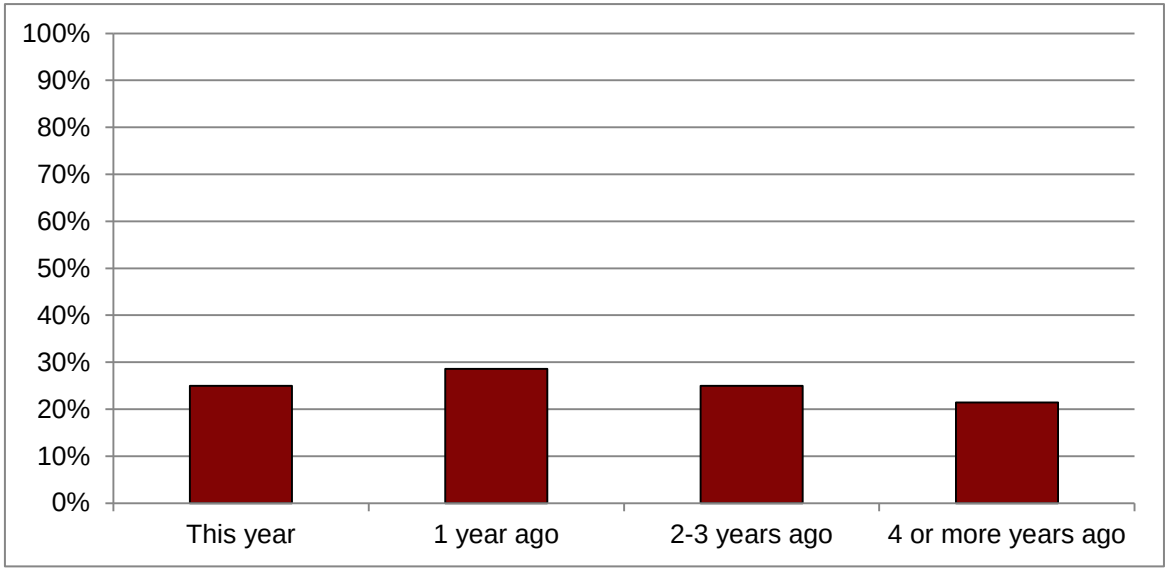
Response	N	%
Algebra 2	18	32%
Algebra 1	8	14%
Geometry	9	16%
Other	7	13%
Basic Math/Pre algebra	7	13%
Precalculus (Algebra)	5	9%
Trigonometry	2	4%
Calculus	0	0%
Total	56	100%

NOTE: Other responses includes Intro to Statistics, AP Statistics, Precalculus w/Trigonometry, Algebra 2 w/ Trigonometry, and MATH 401A/B



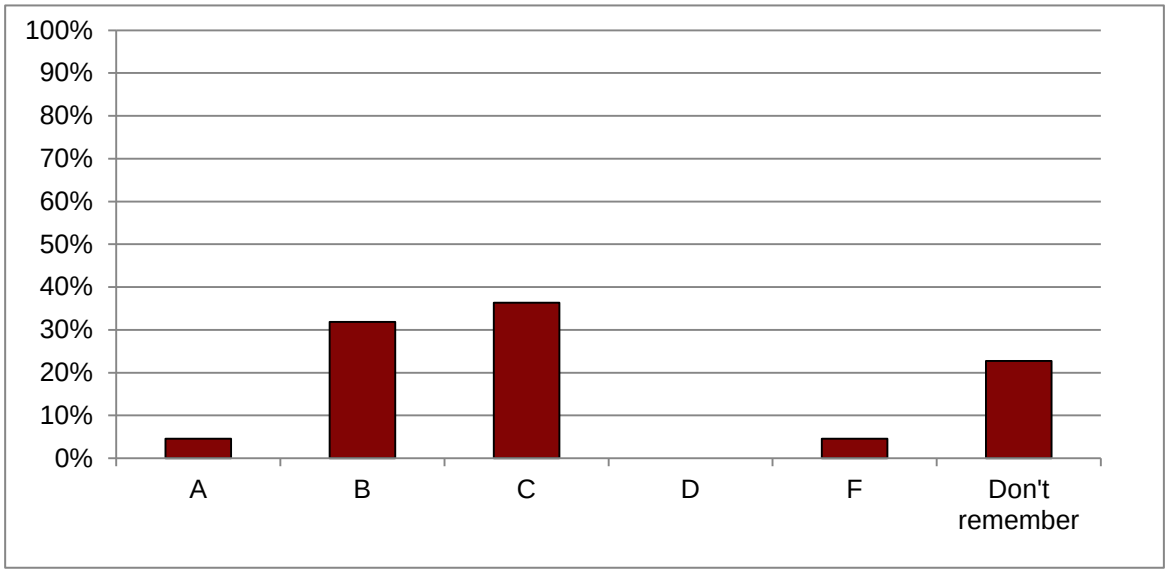
Q7. When did you take you last math class?

Response	N	%
This year	14	25%
1 year ago	16	29%
2-3 years ago	14	25%
4 or more years ago	12	21%
Total	56	100%



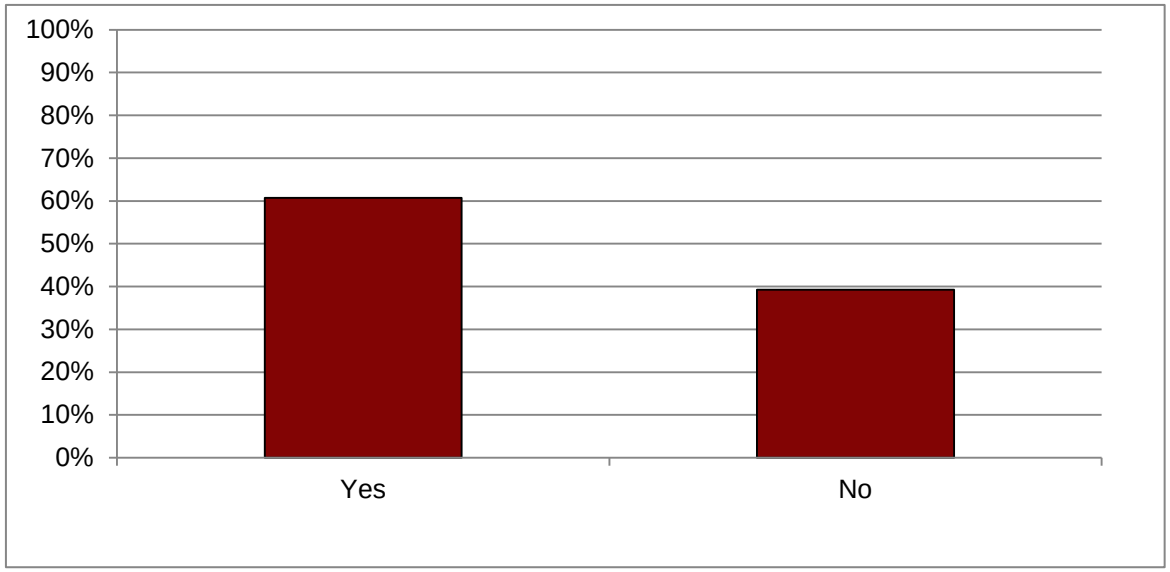
Q8. What grade did you receive in your last math class?

Response	N	%
A	3	5%
B	16	29%
C	20	36%
D	6	11%
F	2	4%
NP	0	0%
P	1	2%
W	0	0%
Don't remember	8	14%
Total	56	100%



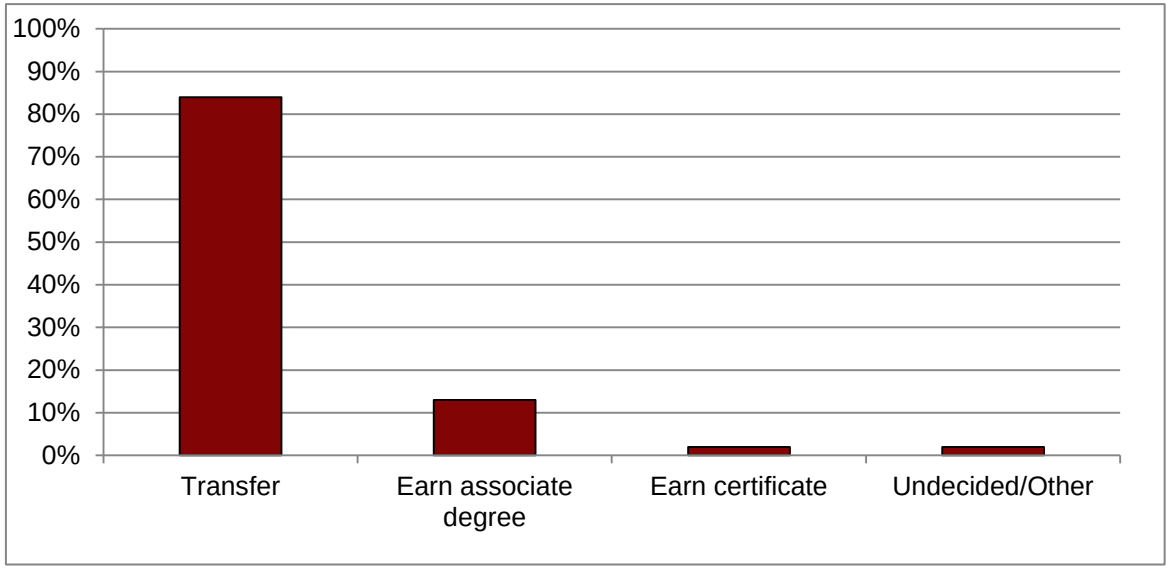
Q9. Have you taken courses at Foothill prior to the Summer Bridge program?

Response	N	%
Yes	34	61%
No	22	39%
Total	56	100%



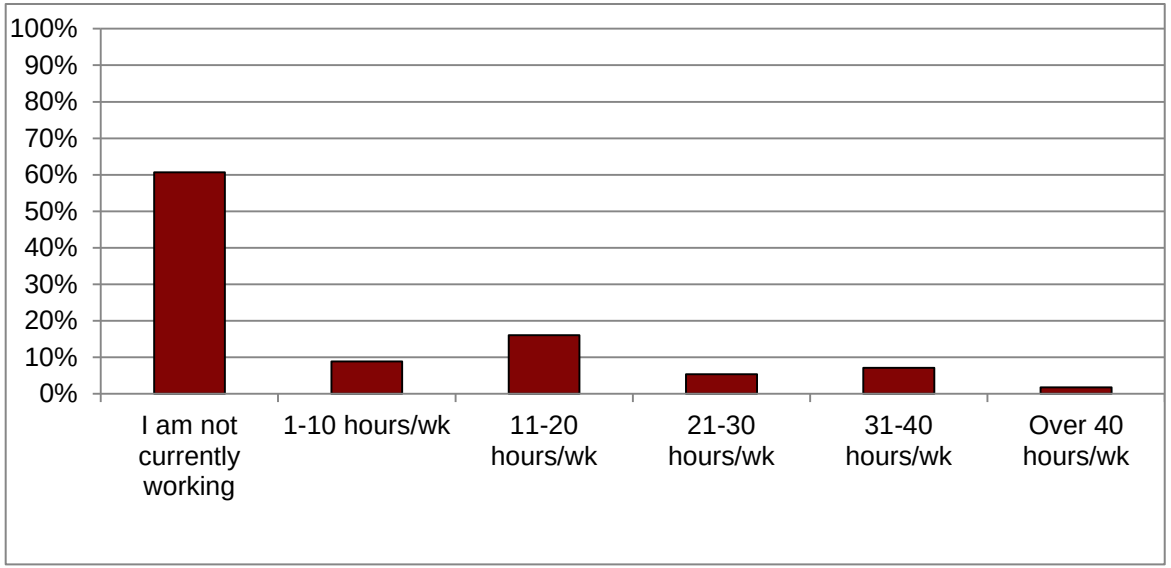
Q10. What is your educational goal?

Response	N	%
Transfer to a four-year college or university	47	84%
Earn an associate degree	7	13%
Earn a certificate	1	2%
Undecided/Other	1	2%
Advance/Prepare for career	0	0%
Continue educational development	0	0%
Improve basic skills	0	0%
Total	56	100%



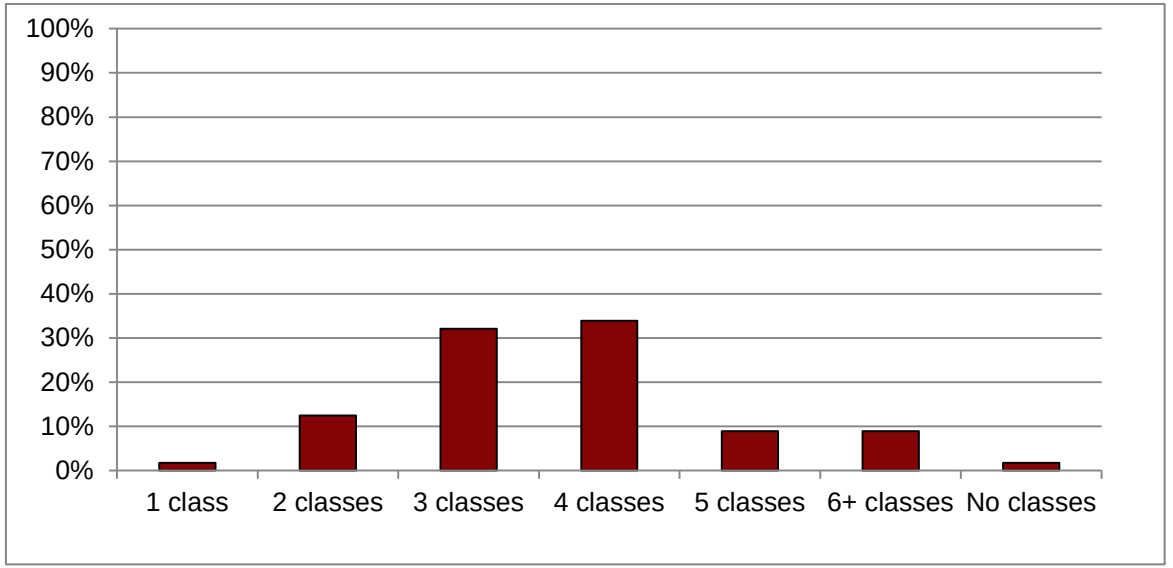
Q11. How many hours a week do you currently work for pay?

Response	N	%
I am not currently working	34	61%
1-10 hours/wk	5	9%
11-20 hours/wk	9	16%
21-30 hours/wk	3	5%
31-40 hours/wk	4	7%
Over 40 hours/wk	1	2%
Total	56	100%



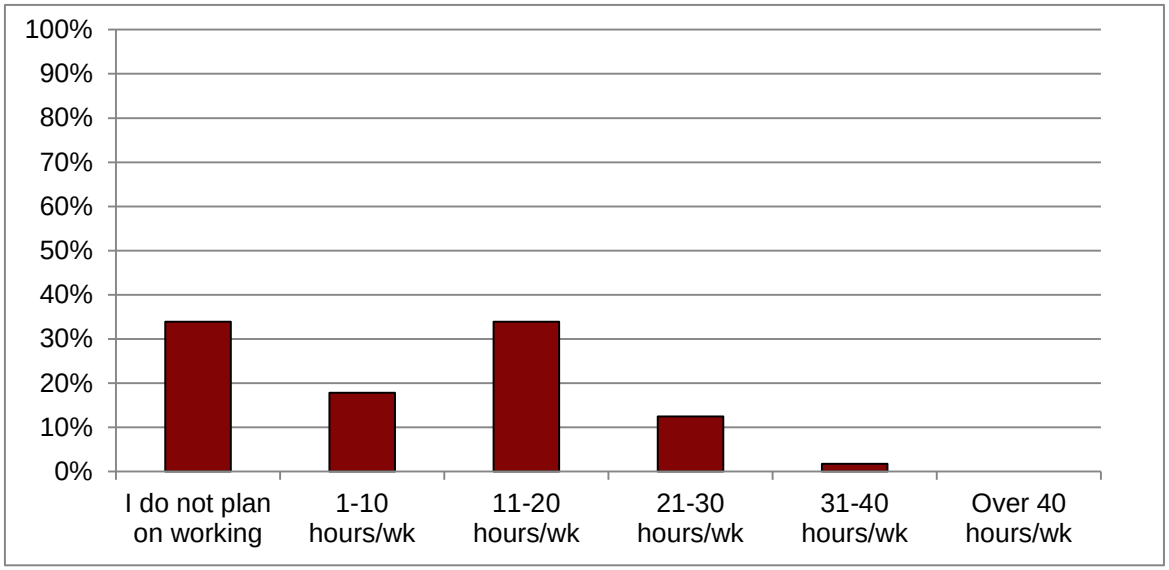
Q12. How many classes are you planning on taking at Foothill in fall?

Response	N	%
1 class	1	2%
2 classes	7	13%
3 classes	18	32%
4 classes	19	34%
5 classes	5	9%
6+ classes	5	9%
No classes	1	2%
Total	56	100%



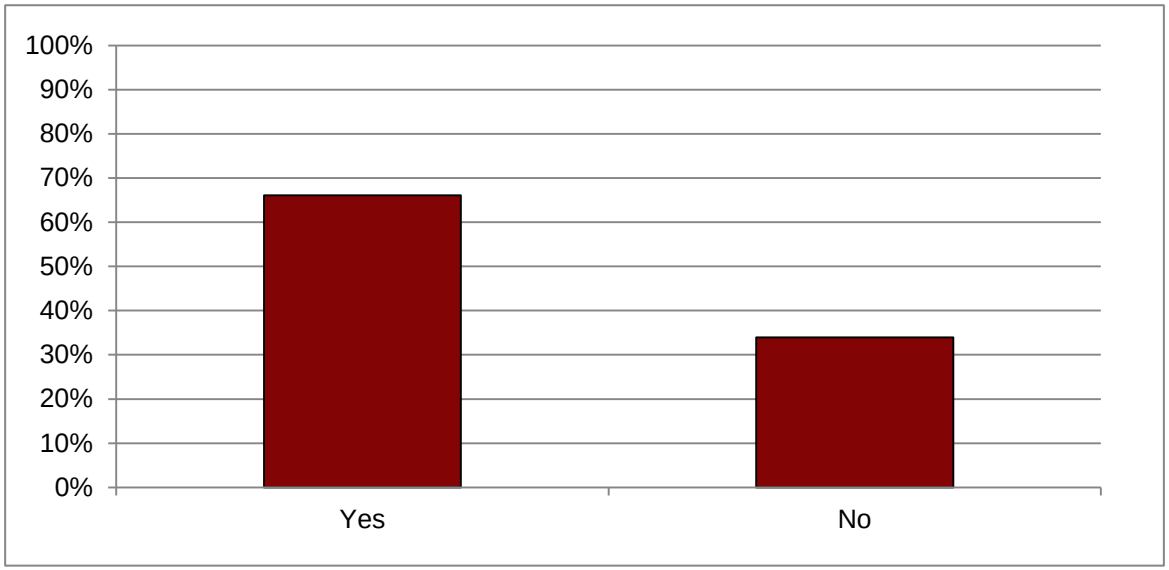
Q13. How many hours a week are you planning to work for pay in the fall?

Response	N	%
I do not plan on working	19	34%
1-10 hours/wk	10	18%
11-20 hours/wk	19	34%
21-30 hours/wk	7	13%
31-40 hours/wk	1	2%
Over 40 hours/wk	0	0%
Total	56	100%



Q14. Are you interested in learning about financial aid options to help pay for college?

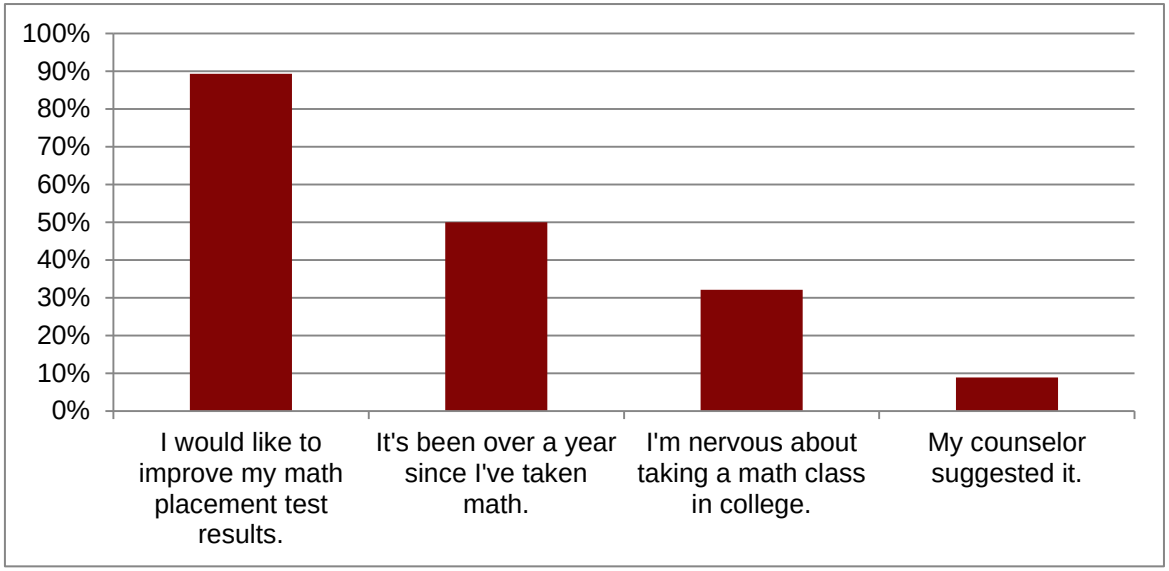
Response	N	%
Yes	37	66%
No	19	34%
Total	56	100%



Q15. Please indicate why you joined the Summer Bridge program (check all boxes that apply):

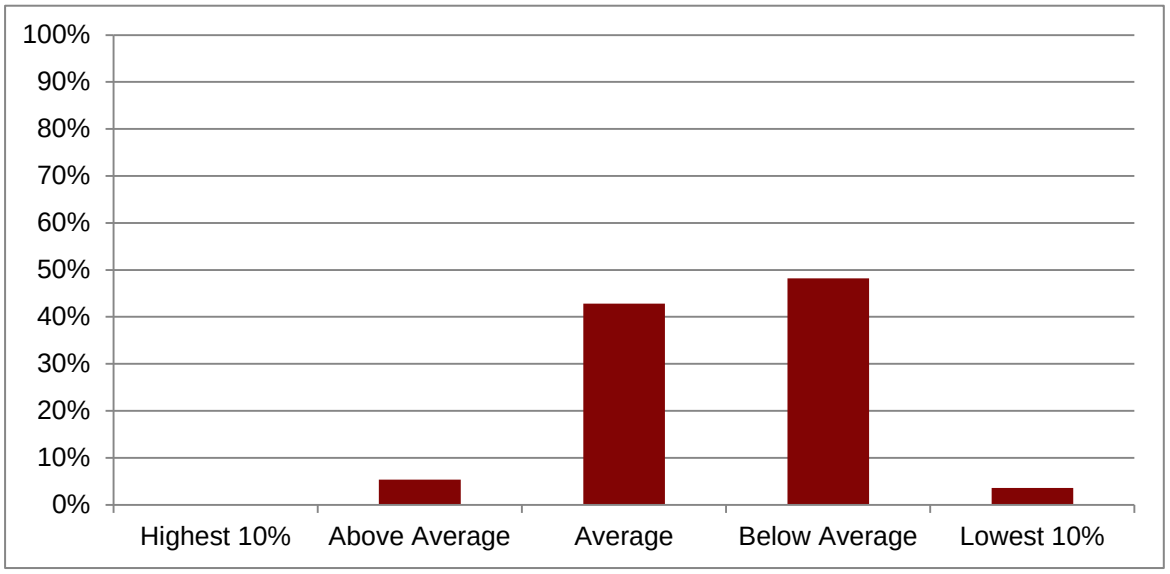
Response	N	%
I would like to improve my math placement test	50	89%
It's been over a year since I've taken math.	28	50%
I'm nervous about taking a math class in college.	18	32%
My counselor suggested it.	5	9%
Other	0	0%
Number of respondents	56	

NOTE: Respondent could selct more than one answer, so percentages will not equal 100%



Q16. How would you rate your overall math ability compared to the average student?

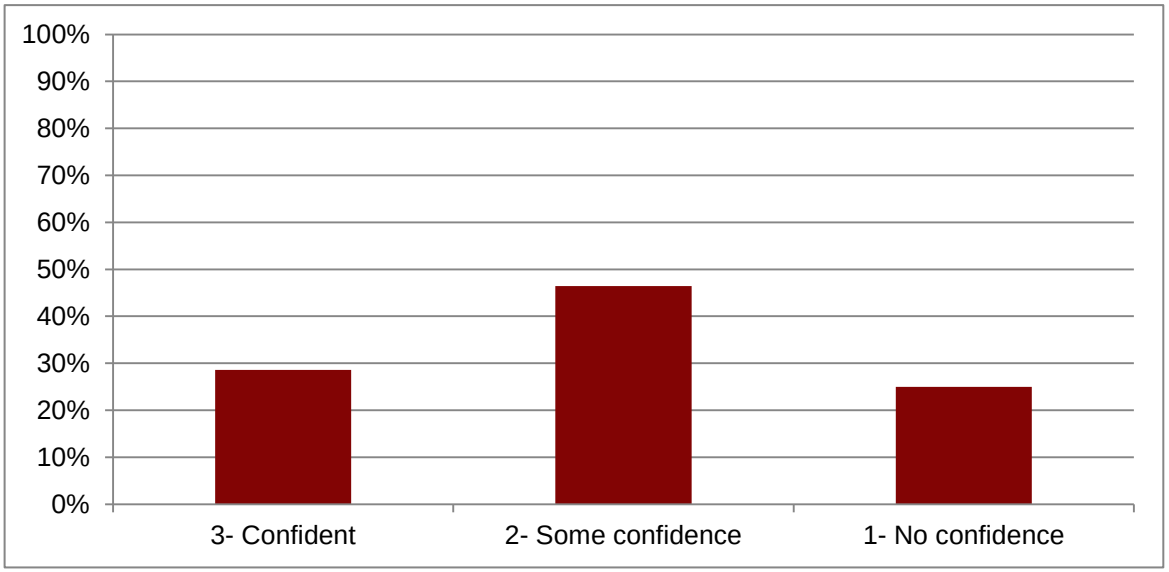
Response	N	%
Highest 10%	0	0%
Above Average	3	5%
Average	24	43%
Below Average	27	48%
Lowest 10%	2	4%
Total	56	100%



Q17. Rate your confidence level regarding your ability to perform the following math concepts.

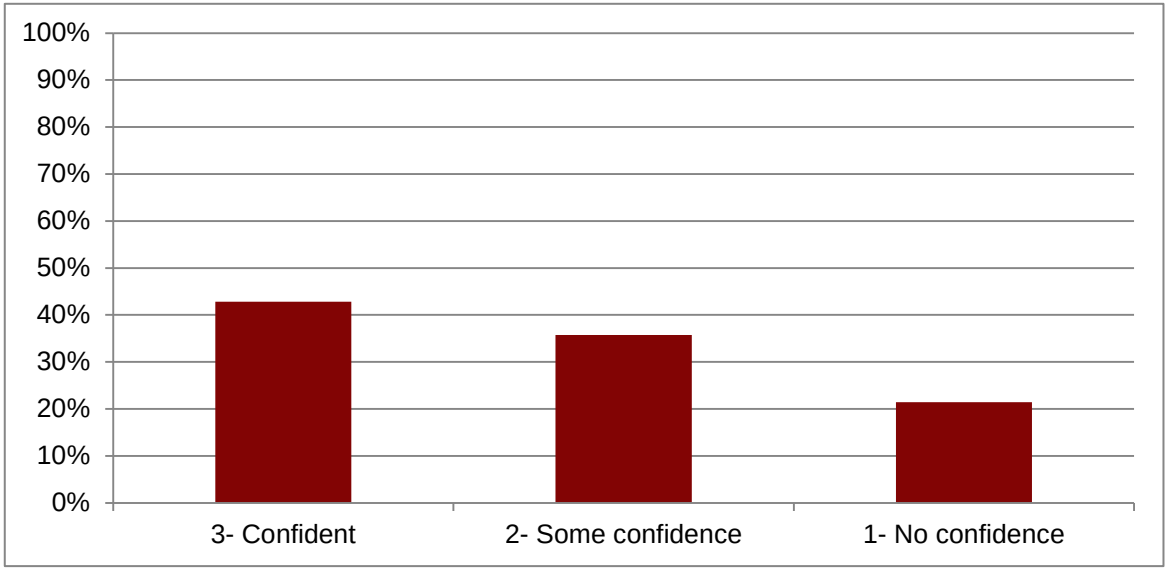
Multiplying or Dividing fraction without a calculator

Response	N	%
3- Confident	16	29%
2- Some confidence	26	46%
1- No confidence	14	25%
Total	56	100%



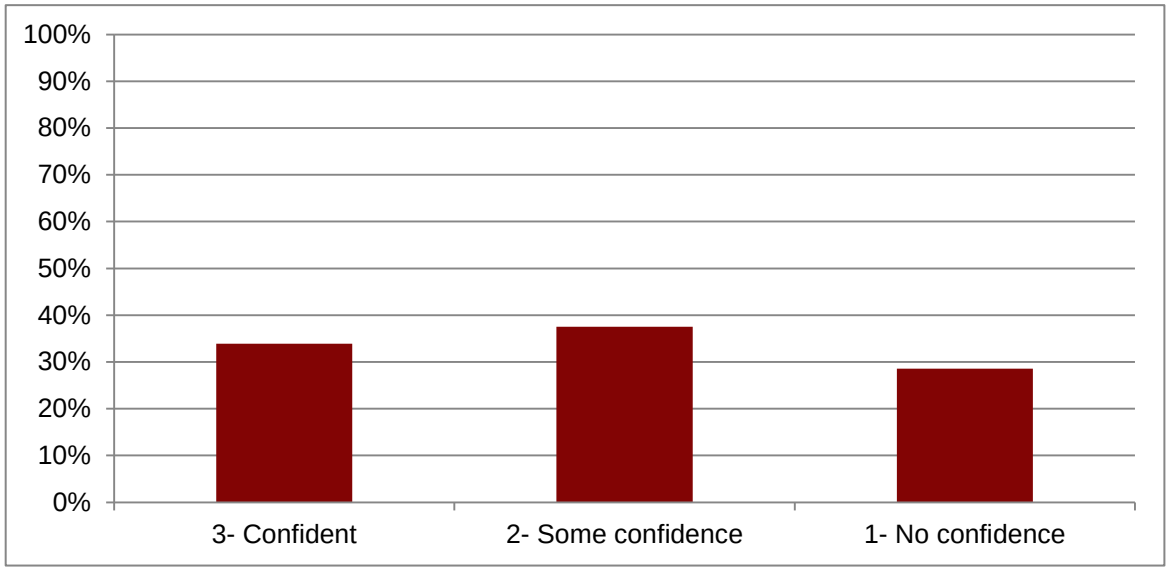
Adding or Subtracting fractions without a calculator.

Response	N	%
3- Confident	24	43%
2- Some confidence	20	36%
1- No confidence	12	21%
Total	56	100%



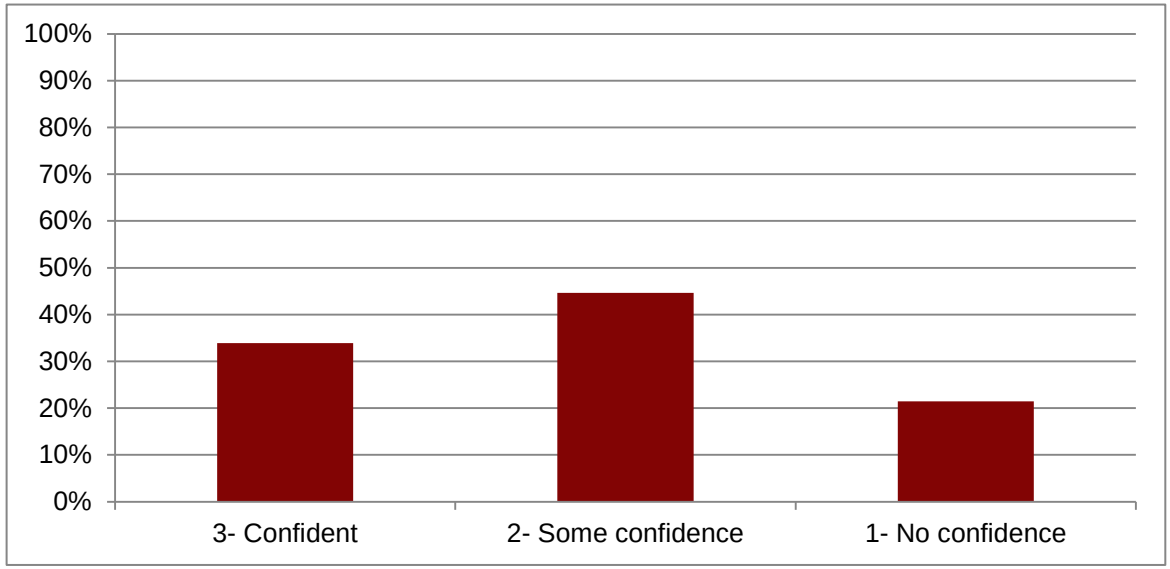
Operations (+, -, x, /) with decimals, without a calculator.

Response	N	%
3- Confident	19	34%
2- Some confidence	21	38%
1- No confidence	16	29%
Total	56	100%



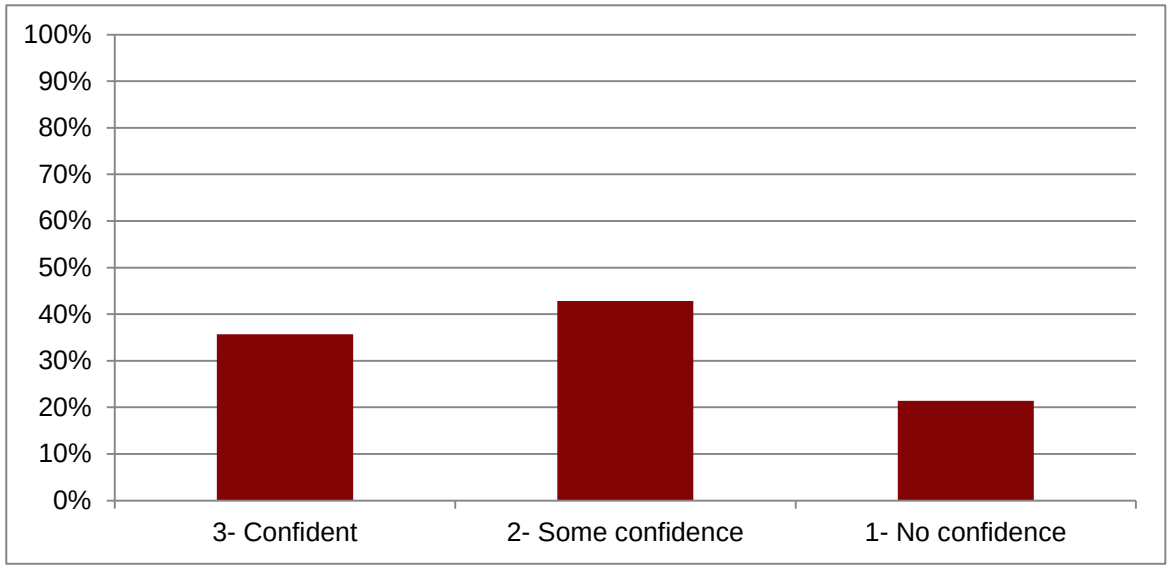
Operations (+, -, x, /) with negative numbers, without a calculator.

Response	N	%
3- Confident	19	34%
2- Some confidence	25	45%
1- No confidence	12	21%
Total	56	100%



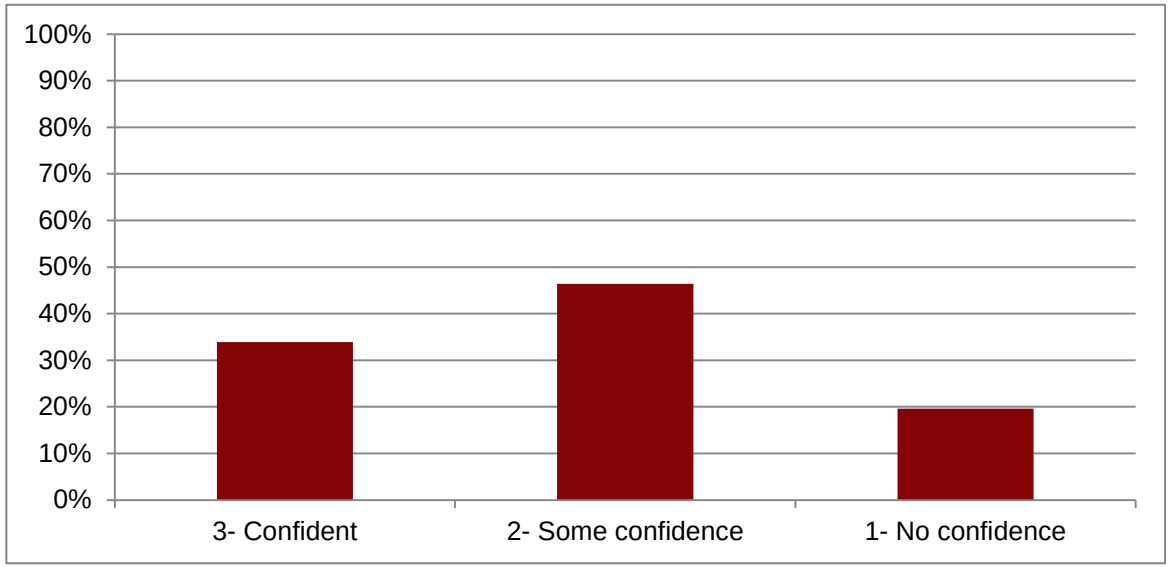
Solving equations for x.

Response	N	%
3- Confident	20	36%
2- Some confidence	24	43%
1- No confidence	12	21%
Total	56	100%



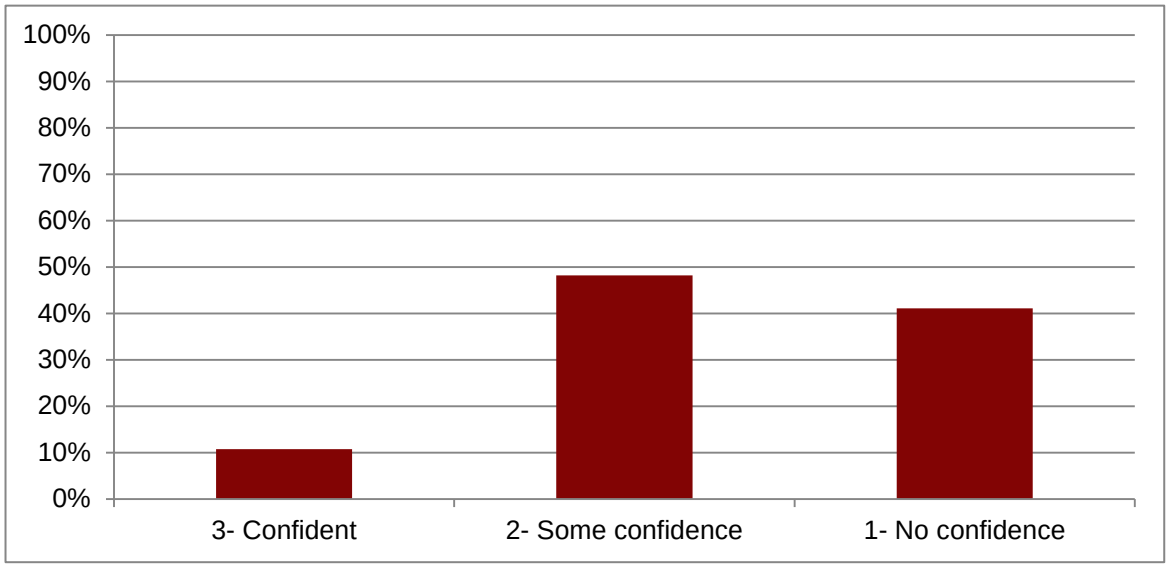
Plotting points on a graph [Example: (-3, 5)].

Response	N	%
3- Confident	19	34%
2- Some confidence	26	46%
1- No confidence	11	20%
Total	56	100%



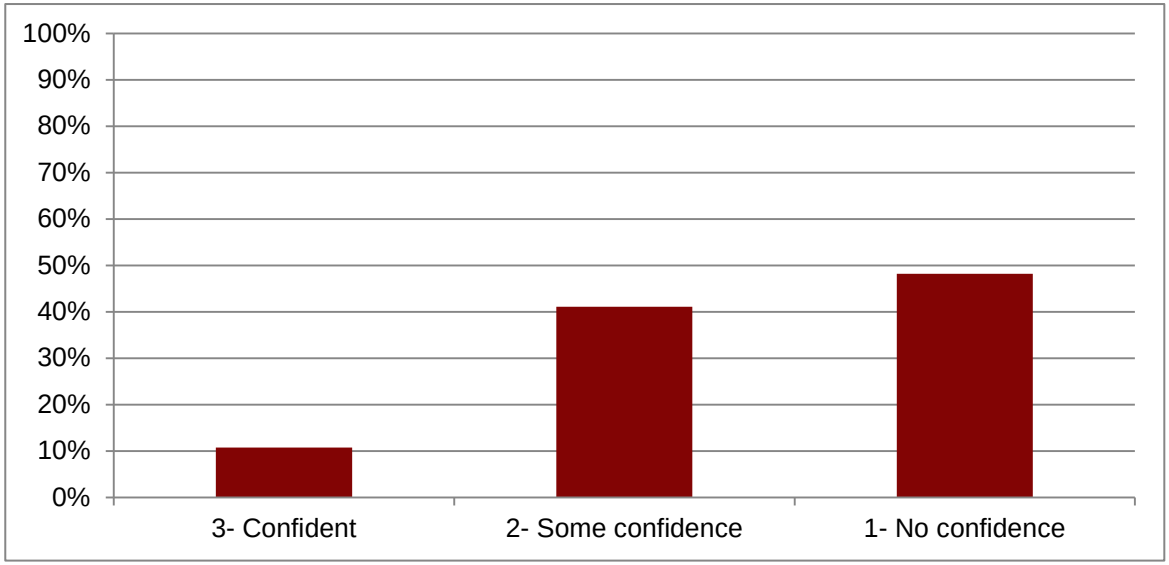
Finding the slope of a line.

Response	N	%
3- Confident	6	11%
2- Some confidence	27	48%
1- No confidence	23	41%
Total	56	100%



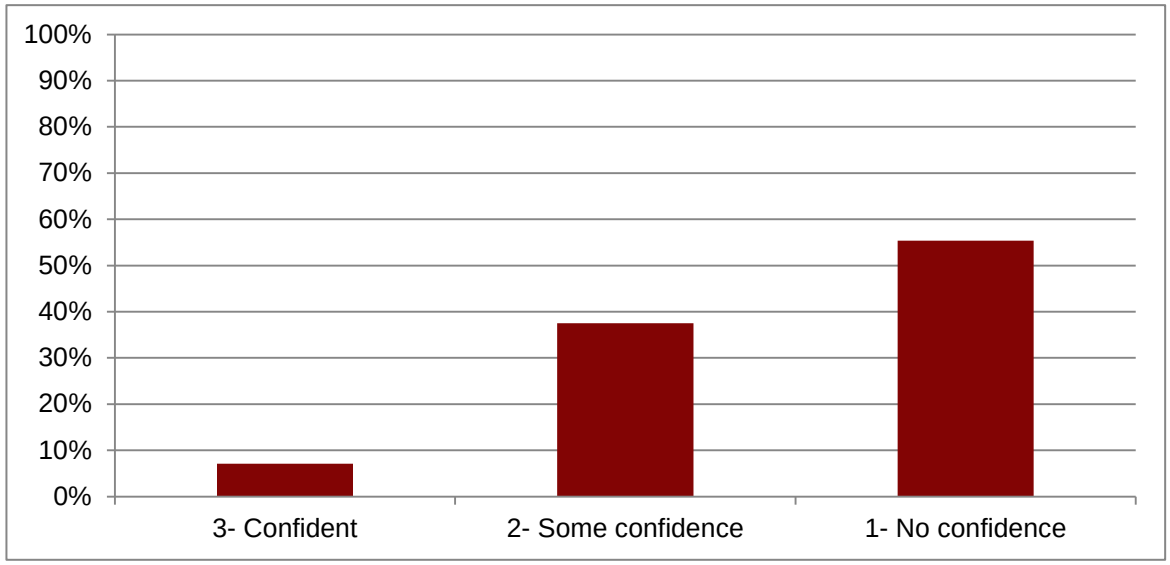
Graphing a line from the equation of a line.

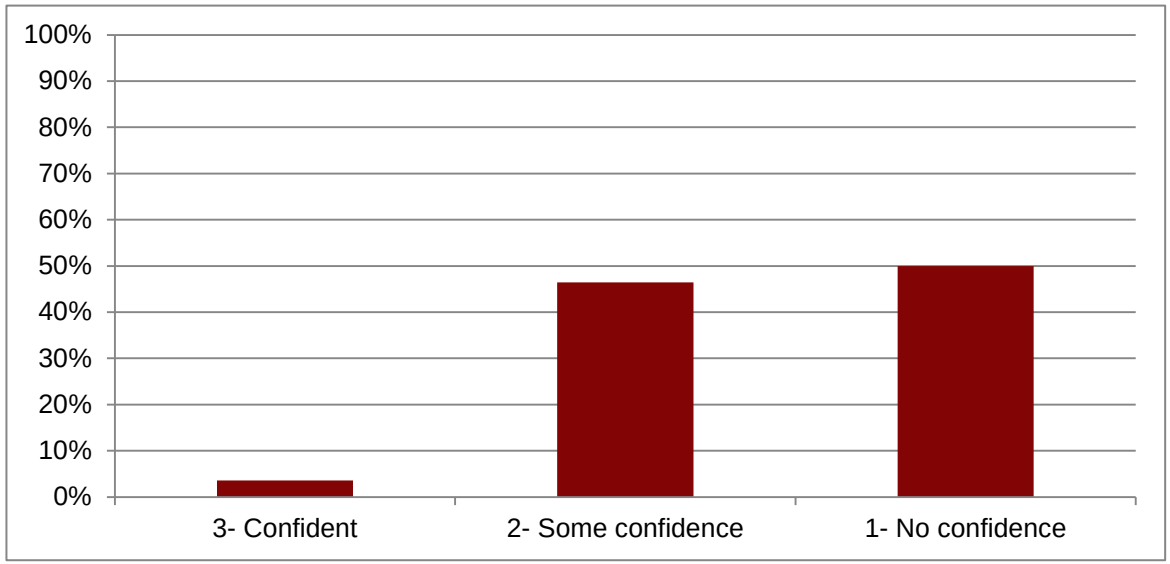
Response	N	%
3- Confident	6	11%
2- Some confidence	23	41%
1- No confidence	27	48%
Total	56	100%



Finding the equation for a line if you are given the graph.

Response	N	%
3- Confident	4	7%
2- Some confidence	21	38%
1- No confidence	31	55%
Total	56	100%



Working with rules of exponents.

Response	N	%
3- Confident	2	4%
2- Some confidence	26	46%
1- No confidence	28	50%
Total	56	100%