

Assessment Survey

(Freshman/Sophomore)

Responses

I. Please assess how well prepared you were when you came to ISU to do the following:

1. Translate a real world situation into mathematical symbology:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	2	1	0

2. Interpret mathematical conclusions in terms of real world situation described by the mathematics:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	1	1	1

3. Evaluate the reasonableness of the mathematical results obtained:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	1	1	1

4. Identify an effective computational method for solving a mathematical problem:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	1	2	0

5. Implement the chosen computational method correctly when solving a mathematical problem:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	1	2	0

6. Use a correct method to check the accuracy of the computational results:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	1	1	1

7. Determine the validity and rigor of a given mathematical argument, e.g., a proof:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	1	0	2	0

8. Develop a valid and rigorous argument from given assumptions and definitions:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	1	1	1	0

9. Present your calculations and arguments clearly:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	1	0	1	1

10. Present your calculations and arguments in detail:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	2	0	1

II. Now please assess the importance of each of the following to your personal goals in pursuing a mathematics major at ISU.

1. Translate a real world situation into mathematical symbology:

1 (little importance)	2	3	4	5 (very important)
0	0	0	1	2

2. Interpret mathematical conclusions in terms of real world situation described by the mathematics:

1 (little importance)	2	3	4	5 (very important)
0	0	0	0	3

3. Evaluate the reasonableness of the mathematical results obtained:

1 (little importance)	2	3	4	5 (very important)
0	0	0	1	2

4. Identify an effective computational method for solving a mathematical problem:

1 (little importance)	2	3	4	5 (very important)
0	0	0	1	2

5. Implement the chosen computational method correctly when solving a mathematical problem:

1 (little importance)	2	3	4	5 (very important)
0	0	0	2	1

6. Use a correct method to check the accuracy of the computational results:

1 (little importance)	2	3	4	5 (very important)
0	0	1	1	1

7. Determine the validity and rigor of a given mathematical argument, e.g., a proof:

1 (little importance)	2	3	4	5 (very important)
0	0	1	1	1

8. Develop a valid and rigorous argument from given assumptions and definitions:

1 (little importance)	2	3	4	5 (very important)
0	0	0	1	2

9. Present your calculations and arguments clearly:

1 (little importance)	2	3	4	5 (very important)
0	0	0	0	3

10. Present your calculations and arguments in detail:

1 (poorly prepared)	2	3	4	5 (very well prepared)
0	0	0	1	2