PAGE:

1. What grade do you expect (or did you receive) in this course?

|  |  | Response <br> Percent |
| :--- | ---: | ---: |
| R | Response <br> Count |  |
| B | $\mathbf{3 8 . 7 \%}$ | $\mathbf{1 , 7 5 8}$ |
| C | $38.1 \%$ | 1,734 |
| D | $19.1 \%$ | 869 |
| F | $3.2 \%$ | 144 |
|  | answered question | $\mathbf{4 , 5 4 7}$ |
|  | skipped question | $\mathbf{1 2}$ |

2. Is Calculus II required for your intended major?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| Yes | $\mathbf{6 3 . 7 \%}$ | $\mathbf{2 , 8 9 7}$ |
| No | $28.7 \%$ | 1,305 |
| I'm not sure | $7.6 \%$ | 346 |
|  | answered question | $\mathbf{4 , 5 4 8}$ |
|  | skipped question | $\mathbf{1 1}$ |

3. Do you intend to take Calculus II?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| Yes | $71.3 \%$ | 3,247 |
|  | answered question | 4,553 |
|  | skipped question | 6 |

3. Do you intend to take Calculus II?

| No | $20.2 \%$ | 919 |
| :--- | :---: | :---: |
| I'm not sure | $8.5 \%$ | 387 |
|  | answered question | 4,553 |
|  | skipped question | 6 |

## PAGE:

4. If you do not intend to take Calculus II, check all reasons that apply.

|  | Response Percent | Response Count |
| :---: | :---: | :---: |
| I never intended to take Calculus II. | 53.0\% | 623 |
| I changed my major and now do not need to take Calculus II. | 23.2\% | 273 |
| My experience in Calculus I made me decide not to take calculus II. | 31.6\% | 371 |
| I have too many other courses I need to complete. | 37.5\% | 441 |
| To do well in Calculus II, I would need to spend more time and effort than I can afford. | 33.0\% | 388 |
| My grade in Calculus I was not good enough for me to continue to Calculus II. | 13.2\% | 155 |
| I do not believe I understand the ideas of Calculus I well enough to take Calculus II. | 24.5\% | 288 |
|  | answered question <br> skipped question | $\begin{array}{r} 1,175 \\ 3,384 \end{array}$ |

## PAGE:

5. When you started this class, did you intend to take Calculus II?
6. When you started this class, did you intend to take Calculus II?

|  | Percent | Count |
| :--- | ---: | ---: |
| Yes | $\mathbf{7 1 . 1 \%}$ | $\mathbf{2 , 8 7 1}$ |
| No | $17.3 \%$ | 700 |
| I wasn't sure | answered question | $\mathbf{4 , 0 3 9}$ |
|  | skipped question | $\mathbf{5 2 0}$ |

6. Select the appropriate response to each of the following:

|  | Strongly <br> Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| This course has increased my interest in taking more mathematics. | $\begin{array}{r} 10.6 \% \\ (469) \end{array}$ | $\begin{array}{r} 13.7 \% \\ (605) \end{array}$ | $\begin{array}{r} 14.7 \% \\ (649) \end{array}$ | $\begin{gathered} 28.4 \% \\ (1,250) \end{gathered}$ | $\begin{array}{r} 22.4 \% \\ (987) \end{array}$ | $\begin{array}{r} 10.1 \% \\ (447) \end{array}$ | 4,407 |
| I am confident in my mathematical abilities. | $\begin{aligned} & 3.9 \% \\ & (172) \end{aligned}$ | $\begin{aligned} & 6.2 \% \\ & (273) \end{aligned}$ | $\begin{aligned} & 9.3 \% \\ & (409) \end{aligned}$ | $\begin{array}{r} 24.7 \% \\ (1,087) \end{array}$ | $\begin{array}{r} 39.8 \% \\ (1,748) \end{array}$ | $\begin{array}{r} 16.0 \% \\ (703) \end{array}$ | 4,392 |
| I am good at computing derivatives and integrals. | $\begin{array}{r} 2.1 \% \\ (93) \end{array}$ | $\begin{aligned} & 3.1 \% \\ & (137) \end{aligned}$ | $\begin{aligned} & 6.1 \% \\ & (266) \end{aligned}$ | $\begin{gathered} 25.4 \% \\ (1,115) \end{gathered}$ | $\begin{array}{r} 44.3 \% \\ (1,945) \end{array}$ | $\begin{array}{r} 19.0 \% \\ (836) \end{array}$ | 4,392 |
| I am able to use ideas of calculus (e.g., differentiation, integration) to solve word problems that I have not seen before. | $\begin{aligned} & 4.0 \% \\ & (178) \end{aligned}$ | $\begin{aligned} & 8.8 \% \\ & (386) \end{aligned}$ | $\begin{array}{r} 13.7 \% \\ (603) \end{array}$ | $\begin{array}{r} 33.3 \% \\ (1,463) \end{array}$ | $\begin{array}{r} 31.0 \% \\ (1,362) \end{array}$ | $\begin{aligned} & 9.2 \% \\ & (406) \end{aligned}$ | 4,398 |
| My previous math courses prepared me to succeed in this course. | $\begin{aligned} & 5.7 \% \\ & (252) \end{aligned}$ | $\begin{aligned} & 7.6 \% \\ & (332) \end{aligned}$ | $\begin{aligned} & 9.7 \% \\ & (428) \end{aligned}$ | $\begin{array}{r} 22.5 \% \\ (991) \end{array}$ | $\begin{array}{r} 29.9 \% \\ (1,312) \end{array}$ | $\begin{gathered} 24.6 \% \\ (1,080) \end{gathered}$ | 4,395 |
| I enjoy doing mathematics. | $\begin{aligned} & 5.9 \% \\ & (261) \end{aligned}$ | $\begin{aligned} & 6.7 \% \\ & (296) \end{aligned}$ | $\begin{aligned} & 9.0 \% \\ & (397) \end{aligned}$ | $\begin{array}{r} 24.8 \% \\ (1,089) \end{array}$ | $\begin{array}{r} 33.7 \% \\ (1,480) \end{array}$ | $\begin{array}{r} 19.7 \% \\ (865) \end{array}$ | 4,388 |
| Mathematics is about getting exact answers to specific problems. | $\begin{aligned} & 4.0 \% \\ & (178) \end{aligned}$ | 10.7\% <br> (469) | $\begin{array}{r} 16.4 \% \\ (722) \end{array}$ | $\begin{array}{r} 30.2 \% \\ (1,327) \end{array}$ | $\begin{array}{r} 27.1 \% \\ (1,194) \end{array}$ | $\begin{array}{r} 11.6 \% \\ (511) \end{array}$ | 4,401 |

## PAGE:

7. Please select the most appropriate response below.

|  | A Not at all certain 1 | 2 | 3 | B Very certain 4 | Rating Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| How certain are you in what you intend to do after college? | $\begin{gathered} 10.7 \% \\ (462) \end{gathered}$ | $\begin{array}{r} 19.2 \% \\ (831) \end{array}$ | $\begin{array}{r} 40.6 \% \\ (1,761) \end{array}$ | $\begin{array}{r} 29.5 \% \\ (1,279) \end{array}$ | 2.89 | 4,333 |
|  |  |  |  | answered question |  | $\begin{aligned} & 4,333 \\ & 226 \end{aligned}$ |

8. Please select the most appropriate response below.

9. Please select the most appropriate response below.

| A <br> a natural part of solving | 2 | 3 | B <br> an <br> indication of my weakness | Rating <br> Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | answere | question | 4,338 |
|  |  |  | skippe | question | 221 |

9. Please select the most appropriate response below.

|  | the <br> problem <br> 1 |  | in <br> mathematics <br> $\mathbf{4}$ |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
| For me, making <br> unsuccessful attempts <br> when solving a <br> mathematics problem is: | $28.7 \%$ <br> $(1,246)$ | $(1,725)$ | $(1,019)$ | $8.0 \%(348)$ | 2.11 | 4,338 |

## PAGE:

10. Please select the most appropriate response below.

|  | A solve specific kinds of problems 1 | 2 | 3 | B make connections and form logical arguments 4 | Rating Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| My success in mathematics PRIMARILY relies on my ability to: | $\begin{array}{r} 12.6 \% \\ (532) \end{array}$ | $\begin{array}{r} 29.5 \% \\ (1,243) \end{array}$ | $\begin{array}{r} 36.0 \% \\ (1,517) \end{array}$ | 22.0\% (926) | 2.67 | 4,218 |
|  |  |  |  | answered question |  | $\begin{aligned} & 4,218 \\ & 341 \end{aligned}$ |

11. Please select the most appropriate response below.

| A I understand the covered material 1 | 2 | 3 | B <br> I can do things the way the teacher | Rating <br> Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | answere | question | 4,235 |
|  |  |  | skippe | question | 324 |

11. Please select the most appropriate response below.

|  | wants 4 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| My score on my mathematics exam is a measure of how well: | $\begin{array}{r} 34.7 \% \\ (1,468) \end{array}$ | $\begin{array}{r} 38.8 \% \\ (1,645) \end{array}$ | $\begin{array}{r} 16.7 \% \\ (709) \end{array}$ | $\begin{aligned} & 9.8 \% \\ & (413) \end{aligned}$ | 2.02 | 4,235 |
|  |  |  |  | answered | stion | 4,235 |
|  |  |  |  | skippe |  | 324 |

12. Please select the most appropriate response below.

|  | A I would never take another mathematics course. 1 | 2 | 3 | B <br> I would continue to take mathematics. 4 | Rating <br> Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| If I had a choice: | 15.7\% (663) | $\begin{array}{r} 20.4 \% \\ (861) \end{array}$ | $\begin{gathered} 26.4 \% \\ (1,117) \end{gathered}$ | 37.5\% (1,583) | 2.86 | 4,224 |
|  |  |  |  | answered question |  | 4,224 |
|  |  |  |  | skipped question |  | 335 |

13. Please select the most appropriate response below.


## PAGE:

14. Please select the most appropriate answer below:

15. Please select the most appropriate response below.

|  | A work problems so students know how to do them 1 | 2 | 3 | B help students learn to reason through problems on their own 4 | Rating <br> Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The primary role of a mathematics instructor is to: | $\begin{array}{r} 10.4 \% \\ (431) \end{array}$ | $\begin{array}{r} 18.2 \% \\ (757) \end{array}$ | $\begin{array}{r} 38.3 \% \\ (1,587) \end{array}$ | $\begin{gathered} 33.1 \% \\ (1,374) \end{gathered}$ | 2.94 | 4,149 |
|  |  |  |  | answere | question | 4,149 |
|  |  |  |  | skippe | question | 410 |

16. Please select the most appropriate response below.

| A | B | Rating | Response |
| :---: | :---: | :---: | :---: | :---: |
|  | answered question | 4,149 |  |
|  | skipped question | 410 |  |

16. Please select the most appropriate response below.

|  | waited for a student to answer 1 | 2 | 3 | answered the question if no one responded quickly 4 | Average | Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| When my Calculus instructor asked a question addressed to the whole class, s/he: | $\begin{array}{r} 25.7 \% \\ (1,065) \end{array}$ | $\begin{gathered} 40.6 \% \\ (1,686) \end{gathered}$ | $\begin{array}{r} 22.0 \% \\ (912) \end{array}$ | $\begin{array}{r} 11.7 \% \\ (486) \end{array}$ | 2.20 | 4,149 |
|  |  |  |  | answere | question | 4,149 |
|  |  |  |  | skippe | question | 410 |

17. Please select the most appropriate response below.


PAGE:
18. My Calculus instructor:

| answered question | 4,057 |
| ---: | :---: |
| skipped question | 502 |

18. My Calculus instructor:

|  | Strongly <br> Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| asked questions to determine if $I$ understood what was being discussed. | $\begin{aligned} & 3.7 \% \\ & (151) \end{aligned}$ | $\begin{aligned} & 6.3 \% \\ & (257) \end{aligned}$ | $\begin{aligned} & 8.7 \% \\ & (352) \end{aligned}$ | $\begin{gathered} 25.6 \% \\ (1,038) \end{gathered}$ | $\begin{array}{r} 39.3 \% \\ (1,589) \end{array}$ | $\begin{array}{r} 16.3 \% \\ (661) \end{array}$ | 4,048 |
| listened carefully to my questions and comments. | $\begin{aligned} & 2.7 \% \\ & (110) \end{aligned}$ | $\begin{aligned} & 3.6 \% \\ & (145) \end{aligned}$ | $\begin{aligned} & 5.7 \% \\ & (231) \end{aligned}$ | $\begin{array}{r} 18.4 \% \\ (742) \end{array}$ | $\begin{gathered} 42.6 \% \\ (1,720) \end{gathered}$ | $\begin{gathered} 26.9 \% \\ (1,087) \end{gathered}$ | 4,035 |
| discussed applications of calculus. | $\begin{array}{r} 2.1 \% \\ (83) \end{array}$ | $\begin{aligned} & 3.9 \% \\ & (156) \end{aligned}$ | $\begin{aligned} & 6.5 \% \\ & (262) \end{aligned}$ | $\begin{array}{r} 19.4 \% \\ (783) \end{array}$ | $\begin{gathered} 41.8 \% \\ (1,691) \end{gathered}$ | $\begin{gathered} 26.5 \% \\ (1,071) \end{gathered}$ | 4,046 |
| allowed time for me to understand difficult ideas. | $\begin{aligned} & 5.1 \% \\ & (205) \end{aligned}$ | $\begin{aligned} & 6.2 \% \\ & (252) \end{aligned}$ | $\begin{array}{r} 12.0 \% \\ (483) \end{array}$ | $\begin{gathered} 24.9 \% \\ (1,005) \end{gathered}$ | $\begin{array}{r} 34.2 \% \\ (1,382) \end{array}$ | $\begin{array}{r} 17.6 \% \\ (713) \end{array}$ | 4,040 |
| helped me become a better problem solver. | $\begin{aligned} & 4.7 \% \\ & (190) \end{aligned}$ | $\begin{aligned} & 5.8 \% \\ & (233) \end{aligned}$ | $\begin{array}{r} 11.2 \% \\ (454) \end{array}$ | $\begin{gathered} 27.1 \% \\ (1,093) \end{gathered}$ | $\begin{array}{r} 33.3 \% \\ (1,346) \end{array}$ | $\begin{array}{r} 17.9 \% \\ (721) \end{array}$ | 4,037 |
| provided explanations that were understandable. | $\begin{aligned} & 4.5 \% \\ & (180) \end{aligned}$ | $\begin{aligned} & 4.8 \% \\ & (195) \end{aligned}$ | $\begin{aligned} & 7.9 \% \\ & (320) \end{aligned}$ | $\begin{array}{r} 20.8 \% \\ (841) \end{array}$ | $\begin{array}{r} 37.6 \% \\ (1,520) \end{array}$ | $\begin{array}{r} 24.4 \% \\ (985) \end{array}$ | 4,041 |
| was available to make appointments outside of office hours, if needed. | $\begin{gathered} 1.4 \% \\ (54) \end{gathered}$ | $\begin{gathered} 1.4 \% \\ (57) \end{gathered}$ | $\begin{aligned} & 4.0 \% \\ & (161) \end{aligned}$ | $\begin{array}{r} 15.9 \% \\ (634) \end{array}$ | $\begin{gathered} 40.4 \% \\ (1,613) \end{gathered}$ | $\begin{array}{r} 36.9 \% \\ (1,475) \end{array}$ | 3,994 |
| discouraged me from wanting to continue taking Calculus. | $\begin{array}{r} 38.5 \% \\ (1,557) \end{array}$ | $\begin{gathered} 29.0 \% \\ (1,174) \end{gathered}$ | $\begin{array}{r} 11.8 \% \\ (478) \end{array}$ | $\begin{aligned} & 9.5 \% \\ & (386) \end{aligned}$ | $\begin{aligned} & 6.4 \% \\ & (259) \end{aligned}$ | $\begin{aligned} & 4.7 \% \\ & (190) \end{aligned}$ | 4,044 |
|  |  |  |  |  | answere skippe | question | $\begin{aligned} & 4,057 \\ & 502 \end{aligned}$ |

19. During class time, how frequently did your instructor:

20. During class time, how frequently did your instructor:

| have students work with one another? | $\begin{array}{r} 30.2 \% \\ (1,222) \end{array}$ | $\begin{array}{r} 14.9 \% \\ (603) \end{array}$ | $\begin{array}{r} 12.1 \% \\ (489) \end{array}$ | $\begin{array}{r} 15.6 \% \\ (632) \end{array}$ | $\begin{array}{r} 14.5 \% \\ (587) \end{array}$ | $\begin{array}{r} 12.5 \% \\ (507) \end{array}$ | 3.07 | 4,040 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| hold a whole-class discussion? | $\begin{array}{r} 24.4 \% \\ (986) \end{array}$ | $\begin{array}{r} 14.8 \% \\ (598) \end{array}$ | $\begin{array}{r} 13.8 \% \\ (559) \end{array}$ | $\begin{array}{r} 16.3 \% \\ (658) \end{array}$ | $\begin{array}{r} 16.1 \% \\ (651) \end{array}$ | $\begin{array}{r} 14.5 \% \\ (587) \end{array}$ | 3.28 | 4,039 |
| have students give presentations? | $\begin{array}{r} 71.3 \% \\ (2,877) \end{array}$ | $\begin{array}{r} 10.8 \% \\ (435) \end{array}$ | $\begin{aligned} & 5.8 \% \\ & (234) \end{aligned}$ | $\begin{aligned} & 5.5 \% \\ & (223) \end{aligned}$ | $\begin{aligned} & 3.8 \% \\ & (152) \end{aligned}$ | $\begin{aligned} & 2.8 \% \\ & (114) \end{aligned}$ | 1.68 | 4,035 |
| have students work individually on problems or tasks? | $\begin{array}{r} 13.7 \% \\ (554) \end{array}$ | $\begin{aligned} & 9.8 \% \\ & (398) \end{aligned}$ | $\begin{array}{r} 14.1 \% \\ (571) \end{array}$ | $\begin{array}{r} 20.8 \% \\ (842) \end{array}$ | $\begin{array}{r} 23.0 \% \\ (930) \end{array}$ | $\begin{array}{r} 18.5 \% \\ (750) \end{array}$ | 3.85 | 4,045 |
| lecture? | $\begin{array}{r} 1.6 \% \\ (66) \end{array}$ | $\begin{array}{r} 2.1 \% \\ (87) \end{array}$ | $\begin{aligned} & 5.5 \% \\ & (222) \end{aligned}$ | $\begin{array}{r} 12.5 \% \\ (507) \end{array}$ | $\begin{array}{r} 25.4 \% \\ (1,028) \end{array}$ | $\begin{array}{r} 52.8 \% \\ (2,139) \end{array}$ | 5.16 | 4,049 |
| ask questions? | $\begin{array}{r} 2.1 \% \\ (83) \end{array}$ | $\begin{aligned} & 5.0 \% \\ & (202) \end{aligned}$ | $\begin{aligned} & 9.9 \% \\ & (399) \end{aligned}$ | $\begin{array}{r} 24.0 \% \\ (970) \end{array}$ | $\begin{array}{r} 31.7 \% \\ (1,279) \end{array}$ | $\begin{array}{r} 27.4 \% \\ (1,108) \end{array}$ | 4.60 | 4,041 |
| ask students to explain their thinking? | $\begin{array}{r} 13.1 \% \\ (529) \end{array}$ | $\begin{array}{r} 14.1 \% \\ (573) \end{array}$ | $\begin{array}{r} 14.0 \% \\ (569) \end{array}$ | $\begin{array}{r} 20.9 \% \\ (846) \end{array}$ | $\begin{array}{r} 21.6 \% \\ (875) \end{array}$ | $\begin{array}{r} 16.3 \% \\ (660) \end{array}$ | 3.73 | 4,052 |
|  |  |  |  |  |  | skipped question |  | $\begin{aligned} & 4,058 \\ & 501 \end{aligned}$ |

PAGE:
20. How frequently did your instructor?

|  | Not at all 1 | 2 | 3 | 4 | 5 | Very often 6 | Rating Average | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| prepare extra material to help students understand calculus concepts or procedures? | $\begin{aligned} & 9.8 \% \\ & (388) \end{aligned}$ | $\begin{array}{r} 11.2 \% \\ (442) \end{array}$ | $\begin{array}{r} 15.4 \% \\ (611) \end{array}$ | $\begin{array}{r} 22.6 \% \\ (895) \end{array}$ | $\begin{array}{r} 22.3 \% \\ (883) \end{array}$ | $\begin{array}{r} 18.6 \% \\ (737) \end{array}$ | 3.92 | 3,956 |
| require you to explain your thinking on your homework? | $\begin{array}{r} 24.5 \% \\ (969) \end{array}$ | $\begin{array}{r} 14.0 \% \\ (553) \end{array}$ | $\begin{array}{r} 14.1 \% \\ (557) \end{array}$ | $\begin{array}{r} 16.9 \% \\ (669) \end{array}$ | $\begin{array}{r} 15.7 \% \\ (620) \end{array}$ | $\begin{array}{r} 14.8 \% \\ (585) \end{array}$ | 3.30 | 3,953 |
| require you to explain your thinking on exams? | $\begin{array}{r} 13.3 \% \\ (523) \end{array}$ | $\begin{aligned} & 9.6 \% \\ & (379) \end{aligned}$ | $\begin{array}{r} 12.8 \% \\ (505) \end{array}$ | $\begin{gathered} 18.5 \% \\ (727) \end{gathered}$ | $\begin{array}{r} 22.3 \% \\ (878) \end{array}$ | $\begin{array}{r} 23.4 \% \\ (920) \end{array}$ | 3.97 | 3,932 |
|  |  |  |  |  |  | answere | question | $\begin{aligned} & 3,963 \\ & 596 \end{aligned}$ |

20. How frequently did your instructor?

| assign sections in your | $\mathbf{2 6 . 2 \%}$ | $12.4 \%$ | $10.9 \%$ | $12.2 \%$ | $13.3 \%$ | $\mathbf{2 5 . 0 \%}$ | 3.49 | 3,947 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| textbook for you to read <br> before coming to class? | $\mathbf{( 1 , 0 3 4 )}$ | $(489)$ | $(431)$ | $(482)$ | $(523)$ | $(988)$ |  |  |
|  |  |  |  | answered question | 3,963 |  |  |  |
|  |  |  |  | skipped question | $\mathbf{5 9 6}$ |  |  |  |

21. My Calculus instructor:


## PAGE:

22. Indicate how often the following occurred.

23. Which of the following technologies did you use during your calculus class? (Check all that apply)

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| None | $29.5 \%$ | 1,160 |
| Graphing Calculator | $58.4 \%$ | $\mathbf{2 , 2 9 4}$ |
| Computers | $36.5 \%$ | 1,435 |
| Clickers or some other electronic <br> response system | $7.3 \%$ | $\mathbf{2 8 7}$ |
|  | answered question | $\mathbf{3 , 9 3 1}$ |

## PAGE:

24. How frequently were the following technologies used during class?

| answered question | 3,935 |
| ---: | :---: |
| skipped question | 624 |

24. How frequently were the following technologies used during class?

25. How did you use technology during your class? (Check only those that apply)

| Response Percent | Response Count |
| :---: | :---: |
| To find answers to problems. $\quad \mathbf{7 0 . 8 \%}$ | 2,293 |
| To understand underlying mathematical ideas. $53.8 \%$ | 1,742 |
| To check written answers after I worked them out by hand | 2,249 |
| answered question <br> skipped question | $\begin{array}{r} 3,238 \\ 1,321 \end{array}$ |
| 26. How did your instructor use technology during your class? (Checknsutythasequestipiply) | 2,797 |
| skipped question | 1,762 |

26. How did your instructor use technology during your class? (Check only those that apply)

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| To illustrate ideas. | $67.2 \%$ | $\mathbf{1 , 8 8 0}$ |
| To find answers to problems. | $48.2 \%$ | 1,347 |
| To check answers after we worked <br> them out by hand. | $54.0 \%$ | 1,511 |
| To illustrate motion/dynamic  <br> animations. $27.4 \%$ | $\mathbf{7 6 6}$ |  |
|  | answered question |  |
| skipped question |  |  |

27. Does your calculator find the symbolic derivative of a function?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| Yes | $25.6 \%$ | 1,002 |
| No | $50.3 \%$ | $\mathbf{1 , 9 7 0}$ |
| N/A (I don't use a calculator) | $24.1 \%$ | 944 |
|  | answered question | $\mathbf{3 , 9 1 6}$ |
|  | skipped question | $\mathbf{6 4 3}$ |

28. Were you allowed to use a graphing calculator during your exams?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| Yes | $50.5 \%$ | $\mathbf{1 , 9 8 4}$ |
| No | $49.5 \%$ | 1,945 |
|  | answered question | 3,929 |
|  | skipped question | $\mathbf{6 3 0}$ |
|  |  |  |

PAGE:
29. Assignments completed outside of class time were:

|  | Not at all 1 | 2 | 3 | 4 | 5 | Very often 6 | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| completed and graded online. | $\begin{array}{r} 35.5 \% \\ (1,376) \end{array}$ | $\begin{aligned} & 2.7 \% \\ & (105) \end{aligned}$ | $\begin{aligned} & 3.4 \% \\ & (131) \end{aligned}$ | $\begin{aligned} & 6.0 \% \\ & (232) \end{aligned}$ | $\begin{aligned} & 8.7 \% \\ & (337) \end{aligned}$ | $\begin{gathered} 43.8 \% \\ (1,697) \end{gathered}$ | 3,878 |
| graded and returned to me. | $\begin{array}{r} 21.6 \% \\ (840) \end{array}$ | $\begin{aligned} & 5.2 \% \\ & (201) \end{aligned}$ | $\begin{aligned} & 5.6 \% \\ & (219) \end{aligned}$ | $\begin{aligned} & 9.1 \% \\ & (355) \end{aligned}$ | $\begin{array}{r} 13.1 \% \\ (510) \end{array}$ | $\begin{gathered} 45.3 \% \\ (1,758) \end{gathered}$ | 3,883 |
| returned with helpful feedback/comments. | $\begin{array}{r} 34.4 \% \\ (1,328) \end{array}$ | $\begin{array}{r} 12.7 \% \\ (490) \end{array}$ | $\begin{array}{r} 11.4 \% \\ (440) \end{array}$ | $\begin{array}{r} 14.7 \% \\ (570) \end{array}$ | $12.8 \%$ <br> (496) | $\begin{array}{r} 14.0 \% \\ (542) \end{array}$ | 3,866 |
| submitted as a group project. | $\begin{array}{r} 69.0 \% \\ (2,673) \end{array}$ | $\begin{aligned} & 5.7 \% \\ & (220) \end{aligned}$ | $\begin{aligned} & 5.4 \% \\ & (208) \end{aligned}$ | $\begin{aligned} & 7.6 \% \\ & (293) \end{aligned}$ | $\begin{aligned} & 6.6 \% \\ & (257) \end{aligned}$ | $\begin{aligned} & 5.7 \% \\ & (222) \end{aligned}$ | 3,873 |
| challenging but doable. | $\begin{aligned} & 6.6 \% \\ & (256) \end{aligned}$ | $\begin{aligned} & 5.0 \% \\ & (194) \end{aligned}$ | $\begin{array}{r} 13.0 \% \\ (505) \end{array}$ | $\begin{array}{r} 25.2 \% \\ (978) \end{array}$ | $\begin{array}{r} 31.8 \% \\ (1,236) \end{array}$ | $\begin{array}{r} 18.4 \% \\ (713) \end{array}$ | 3,882 |
|  |  |  |  |  | swered | uestion | $\begin{aligned} & 3,903 \\ & 656 \end{aligned}$ |

30. The assignments completed outside of class time required that I :

|  | Not at all 1 | 2 | 3 | 4 | 5 | Very often 6 | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| solve word problems. | $\begin{aligned} & 3.2 \% \\ & (124) \end{aligned}$ | $\begin{aligned} & 3.8 \% \\ & (147) \end{aligned}$ | $\begin{array}{r} 10.1 \% \\ (393) \end{array}$ | $\begin{array}{r} 23.9 \% \\ (931) \end{array}$ | $\begin{array}{r} 30.3 \% \\ (1,180) \end{array}$ | $\begin{gathered} 28.7 \% \\ (1,116) \end{gathered}$ | 3,891 |
| solve problems unlike those done in class or in the book. | $\begin{array}{r} 11.6 \% \\ (451) \end{array}$ | $\begin{array}{r} 15.8 \% \\ (616) \end{array}$ | $\begin{array}{r} 15.3 \% \\ (596) \end{array}$ | $\begin{array}{r} 19.7 \% \\ (767) \end{array}$ | $\begin{array}{r} 19.0 \% \\ (738) \end{array}$ | $\begin{array}{r} 18.5 \% \\ (721) \end{array}$ | 3,889 |
| use technology to understand ideas. | $\begin{array}{r} 30.4 \% \\ (1,176) \end{array}$ | $\begin{array}{r} 16.6 \% \\ (642) \end{array}$ | $\begin{array}{r} 14.0 \% \\ (542) \end{array}$ | $\begin{array}{r} 17.4 \% \\ (674) \end{array}$ | $\begin{array}{r} 12.4 \% \\ (480) \end{array}$ | $\begin{aligned} & 9.2 \% \\ & (358) \end{aligned}$ | 3,872 |
|  |  |  |  |  | swered <br> skipped | uestion <br> uestion | $\begin{aligned} & 3,897 \\ & 662 \end{aligned}$ |
| 31. The exam questions required that I solve: |  |  |  | answered question |  |  | 3,909 |
|  | Not at all | 2 | 3 | skipped quebetorn 45 often |  |  | Res650se Count |

31. The exam questions required that I solve:

|  | 1 |  |  | 6 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| word problems. | $\begin{array}{r} 2.3 \% \\ (88) \end{array}$ | $\begin{aligned} & 5.7 \% \\ & (221) \end{aligned}$ | $\begin{array}{r} 12.6 \% \\ (490) \end{array}$ | $\begin{array}{r} 25.0 \% \\ (970) \end{array}$ | $\begin{array}{r} 24.4 \% \\ (947) \end{array}$ | $\begin{array}{r} 29.9 \% \\ (1,161) \end{array}$ | 3,877 |
| problems unlike those done in class or in the book. | $\begin{array}{r} 17.7 \% \\ (688) \end{array}$ | $\begin{array}{r} 19.5 \% \\ (755) \end{array}$ | $\begin{array}{r} 17.8 \% \\ (689) \end{array}$ | $\begin{array}{r} 18.0 \% \\ (700) \end{array}$ | $\begin{array}{r} 12.5 \% \\ (486) \end{array}$ | $\begin{array}{r} 14.5 \% \\ (561) \end{array}$ | 3,879 |
|  |  |  |  |  | swered sipped | uestion | 3,909 <br> 650 |

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32. Please select the most appropriate response for each of the following.

|  | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| My Calculus exams were a good assessment of what I learned. | $\begin{aligned} & 6.2 \% \\ & (240) \end{aligned}$ | $\begin{aligned} & 8.1 \% \\ & (317) \end{aligned}$ | $\begin{array}{r} 10.7 \% \\ (418) \end{array}$ | $\begin{array}{r} 19.7 \% \\ (767) \end{array}$ | $\begin{array}{r} 36.7 \% \\ (1,430) \end{array}$ | $\begin{gathered} 18.6 \% \\ (723) \end{gathered}$ | 3,895 |
| My exams were graded fairly. | $\begin{array}{r} 2.3 \% \\ (90) \end{array}$ | $\begin{aligned} & 4.3 \% \\ & (169) \end{aligned}$ | $\begin{aligned} & 7.1 \% \\ & (278) \end{aligned}$ | $\begin{array}{r} 15.8 \% \\ (616) \end{array}$ | $\begin{gathered} 41.4 \% \\ (1,610) \end{gathered}$ | $\begin{gathered} 29.0 \% \\ (1,127) \end{gathered}$ | 3,890 |
| My homework was graded fairly. | $\begin{aligned} & 2.8 \% \\ & (107) \end{aligned}$ | $\begin{array}{r} 2.6 \% \\ (99) \end{array}$ | $\begin{aligned} & 5.7 \% \\ & (218) \end{aligned}$ | $\begin{array}{r} 14.2 \% \\ (544) \end{array}$ | $\begin{gathered} 41.9 \% \\ (1,606) \end{gathered}$ | $\begin{gathered} 32.8 \% \\ (1,257) \end{gathered}$ | 3,831 |
|  |  |  |  |  | answere | question | $\begin{aligned} & 3,896 \\ & 663 \end{aligned}$ |

33. During class:

|  | Never | Some class sessions | About half the class sessions | Most class sessions | Every class session | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I contributed to class discussions. | $\begin{array}{r} 21.1 \% \\ (819) \end{array}$ | $\begin{array}{r} 34.8 \% \\ (1,350) \end{array}$ | $\begin{array}{r} 18.0 \% \\ (697) \end{array}$ | $\begin{array}{r} 18.8 \% \\ (729) \end{array}$ | $\begin{aligned} & 7.4 \% \\ & (286) \end{aligned}$ | 3,881 |
|  |  |  |  | answered question |  | $\begin{aligned} & 3,891 \\ & 668 \end{aligned}$ |

33. During class:

| I was lost and unable to follow the lecture or discussion. | $\begin{gathered} 36.2 \% \\ (1,405) \end{gathered}$ | $\begin{array}{r} 44.0 \% \\ (1,706) \end{array}$ | $\begin{aligned} & 8.9 \% \\ & (345) \end{aligned}$ | $\begin{aligned} & 8.0 \% \\ & (312) \end{aligned}$ | $\begin{aligned} & 2.9 \% \\ & (112) \end{aligned}$ | 3,880 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I asked questions. | $\begin{array}{r} 23.3 \% \\ (902) \end{array}$ | $\begin{array}{r} 43.1 \% \\ (1,669) \end{array}$ | $\begin{array}{r} 16.0 \% \\ (618) \end{array}$ | $\begin{array}{r} 13.4 \% \\ (518) \end{array}$ | $\begin{aligned} & 4.2 \% \\ & (163) \end{aligned}$ | 3,870 |
| I simply copied whatever was written on the board. | $\begin{array}{r} 14.9 \% \\ (578) \end{array}$ | $\begin{array}{r} 31.4 \% \\ (1,216) \end{array}$ | $\begin{array}{r} 13.5 \% \\ (522) \end{array}$ | $\begin{array}{r} 21.7 \% \\ (840) \end{array}$ | $\begin{array}{r} 18.6 \% \\ (721) \end{array}$ | 3,877 |
|  |  |  | answered question |  |  | $\begin{aligned} & 3,891 \\ & 668 \end{aligned}$ |

34. How often did you do the following?

|  | Never | Once a month | A few times a month | Once a <br> week | More than once a week | Response Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Read the textbook prior to coming to class. | $\begin{array}{r} 38.0 \% \\ (1,479) \end{array}$ | $\begin{array}{r} 15.4 \% \\ (599) \end{array}$ | $\begin{array}{r} 17.4 \% \\ (675) \end{array}$ | $\begin{array}{r} 15.6 \% \\ (607) \end{array}$ | $\begin{array}{r} 13.6 \% \\ (530) \end{array}$ | 3,890 |
| Visit your instructor's office hours. | $\begin{array}{r} 51.3 \% \\ (1,994) \end{array}$ | $\begin{array}{r} 21.5 \% \\ (835) \end{array}$ | $\begin{array}{r} 15.7 \% \\ (610) \end{array}$ | $\begin{aligned} & 6.9 \% \\ & (269) \end{aligned}$ | $\begin{aligned} & 4.6 \% \\ & (178) \end{aligned}$ | 3,886 |
| Use online tutoring. | $\begin{array}{r} 76.9 \% \\ (2,987) \end{array}$ | $\begin{aligned} & 5.6 \% \\ & (218) \end{aligned}$ | $\begin{aligned} & 7.0 \% \\ & (271) \end{aligned}$ | $\begin{aligned} & 5.0 \% \\ & (195) \end{aligned}$ | $\begin{aligned} & 5.5 \% \\ & (213) \end{aligned}$ | 3,884 |
| Visit a tutor to assist with this course. | $\begin{array}{r} 58.3 \% \\ (2,266) \end{array}$ | $\begin{array}{r} 10.9 \% \\ (425) \end{array}$ | $\begin{array}{r} 12.4 \% \\ (481) \end{array}$ | $\begin{aligned} & 9.3 \% \\ & (363) \end{aligned}$ | $\begin{aligned} & 9.1 \% \\ & (354) \end{aligned}$ | 3,889 |
|  |  |  |  | answered question |  | $\begin{aligned} & 3,894 \\ & 665 \end{aligned}$ |

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35. Check the box that describes your level of agreement with the following statements.

| Strongly Disagree Slightly Slightly Agree Strongly Response |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  | answered question | 3,895 |  |

35. Check the box that describes your level of agreement with the following statements.

|  | Disagree |  | Disagree | Agree |  | Agree | Count |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The homework for the course helped me learn the material. | $\begin{aligned} & 3.9 \% \\ & (150) \end{aligned}$ | $\begin{aligned} & 4.2 \% \\ & (164) \end{aligned}$ | $\begin{aligned} & 5.3 \% \\ & (207) \end{aligned}$ | $\begin{array}{r} 20.9 \% \\ (811) \end{array}$ | $\begin{array}{r} 39.4 \% \\ (1,530) \end{array}$ | $\begin{array}{r} 26.4 \% \\ (1,024) \end{array}$ | 3,886 |
| The textbook and/or class materials helped me learn the material. | $\begin{aligned} & 4.9 \% \\ & (192) \end{aligned}$ | $\begin{aligned} & 5.8 \% \\ & (227) \end{aligned}$ | $\begin{aligned} & 8.2 \% \\ & (320) \end{aligned}$ | $\begin{array}{r} 23.6 \% \\ (915) \end{array}$ | $\begin{array}{r} 36.7 \% \\ (1,425) \end{array}$ | $\begin{array}{r} 20.7 \% \\ (803) \end{array}$ | 3,882 |
| The textbook or reading materials for the course were readable. | $\begin{aligned} & 4.5 \% \\ & (174) \end{aligned}$ | $\begin{aligned} & 5.8 \% \\ & (224) \end{aligned}$ | $\begin{array}{r} 11.8 \% \\ (459) \end{array}$ | $\begin{array}{r} 26.6 \% \\ (1,032) \end{array}$ | $\begin{array}{r} 35.4 \% \\ (1,370) \end{array}$ | $\begin{array}{r} 15.9 \% \\ (615) \end{array}$ | 3,874 |
| I completed all my assigned homework. | $\begin{aligned} & 3.3 \% \\ & (129) \end{aligned}$ | $\begin{aligned} & 5.9 \% \\ & (228) \end{aligned}$ | $\begin{aligned} & 6.4 \% \\ & (247) \end{aligned}$ | $\begin{array}{r} 14.6 \% \\ (564) \end{array}$ | $\begin{array}{r} 30.4 \% \\ (1,176) \end{array}$ | $\begin{array}{r} 39.5 \% \\ (1,529) \end{array}$ | 3,873 |
|  |  |  |  |  | answere | uestion | $3,895$ <br> 664 |

36. Did you meet with other students to study or complete homework outside of class?

|  |  | Response <br> Percent |
| :--- | ---: | :---: |
| Yes | Response <br> Count |  |
| No | $59.5 \%$ | $\mathbf{2 , 3 1 5}$ |
|  | $40.5 \%$ | 1,577 |
|  | answered question | $\mathbf{3 , 8 9 2}$ |
|  | skipped question | $\mathbf{6 6 7}$ |

37. Did you belong to a calculus study group organized by your instructor or department?

|  |  | Response <br> Percent |
| :---: | ---: | ---: |
| Res | Response <br> Count |  |
| No | $10.1 \%$ | 391 |
|  | $89.9 \%$ | 3,495 |
|  | answered question | $\mathbf{3 , 8 8 6}$ |
|  | skipped question | $\mathbf{6 7 3}$ |

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38. Does your math department or university provide a walk-in tutor center for mathematics?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| Yes | $93.4 \%$ | 3,601 |
| No | $6.6 \%$ | 253 |
|  | answered question | 3,854 |
|  | skipped question | $\mathbf{7 0 5}$ |
|  |  |  |

39. Approximately how many hours per week did you work at a job this semester/term?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| $\mathbf{0}$ | $\mathbf{6 0 . 3 \%}$ | 2,339 |
| $\mathbf{1 - 5}$ | $8.9 \%$ | 347 |
| $\mathbf{6 - 1 0}$ | $11.0 \%$ | 426 |
| $\mathbf{1 1 - 1 5}$ | $6.7 \%$ | 261 |
| $\mathbf{1 6 - 2 0}$ | $5.4 \%$ | 210 |
| $\mathbf{2 1 - 3 0}$ | $4.1 \%$ | 160 |
| More than 30 | $3.6 \%$ | 138 |
|  | answered question | 3,881 |

40. Approximately how many hours per week did you participate in organized extracurricular activities such as sports, college paper, or clubs?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| 0 | $25.3 \%$ | 984 |
|  | answered question | 3,887 |
|  | skipped question | 672 |


| 40. Approximately how many hours per week did you participate in organized extracurricular activities <br> such as sports, college paper, or clubs? |  |
| :--- | ---: |
| $\mathbf{1 - 5}$ | $\mathbf{3 8 . 1 \%}$ |
| $\mathbf{6 - 1 0}$ | $17.2 \%$ |
| $\mathbf{1 1 - 1 5}$ | $9.6 \%$ |
| $\mathbf{1 6 - 2 0}$ | $5.2 \%$ |
| $\mathbf{2 1 - 3 0}$ | $2.5 \%$ |
| More than $\mathbf{3 0}$ | $2.1 \%$ |
|  | answered question |

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41. Approximately how many hours per week did you spend preparing for all classes (studying, reading, writing, doing homework or lab work, analyzing data, or other academic activities) this semester/term?

|  | Response <br> Percent | Response <br> Count |
| :--- | ---: | ---: |
| $\mathbf{0}$ | $0.4 \%$ | 17 |
| $\mathbf{1 - 5}$ | $7.8 \%$ | 303 |
| $\mathbf{6 - 1 0}$ | $15.6 \%$ | 604 |
| $\mathbf{1 1 - 1 5}$ | $22.5 \%$ | 874 |
| $\mathbf{1 6 - 2 0}$ | $22.4 \%$ | 871 |
| $\mathbf{2 1 - 3 0}$ | $17.6 \%$ | 683 |
| More than 30 | $13.7 \%$ | 531 |
|  | answered question | $\mathbf{3 , 8 8 3}$ |

42. Approximately how many hours per week did you spend preparing foweredulquestudying, reading, 884 doing homework or lab work) this semester/term?
43. Approximately how many hours per week did you spend preparing for calculus (studying, reading, doing homework or lab work) this semester/term?

|  | Percent | Count |
| :--- | ---: | ---: |
| $\mathbf{0}$ | $1.5 \%$ | 60 |
| $\mathbf{1 - 5}$ | $\mathbf{5 3 . 0} \%$ | $\mathbf{2 , 0 5 8}$ |
| $\mathbf{6 - 1 0}$ | $30.3 \%$ | 1,175 |
| $\mathbf{1 1 - 1 5}$ | $9.2 \%$ | 357 |
| $\mathbf{1 6 - 2 0}$ | $3.6 \%$ | 141 |
| $\mathbf{2 1 - 3 0}$ | $\mathbf{1 . 4 \%}$ | 54 |
| More than 30 | $\mathbf{1 . 0 \%}$ | 39 |
|  | answered question | $\mathbf{3 , 8 8 4}$ |
|  | skipped question | $\mathbf{6 7 5}$ |

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43. What is your home zip code at the time you graduated from high school? If you graduated from a high school outside the U.S., enter 00000

|  |  | Response Count |
| :---: | :---: | :---: |
|  | Show replies | 3,903 |
|  | answered question | 3,903 |
|  | skipped question | 656 |
| 44. What is your birth date? |  |  |
|  | Response Percent | Response Count |
| Enter numbers as indicated -> <br> Show replies | 100.0\% | 3,903 |
|  | answered question | 3,903 |
|  | skipped question | 656 |

45. Your email address:

|  | Response <br> Count |
| :--- | :--- |
|  | Show replies |
| answered question | 1,404 |
| skipped question | 3,150 |

46. Your student ID number:

|  | Response <br> Count |  |
| :--- | :--- | :--- |
|  | Show replies | 1,676 |
| answered question | 1,676 |  |
| skipped question | $\mathbf{2 , 8 8 3}$ |  |

47. Is there anything else you want to tell us about your experience in Calculus I?

|  | Response <br> Count |
| :--- | :--- |
| Show replies | 841 |
| answered question | 841 |
| skipped question | 3,718 |

