

Chapter 9 Quiz

Problems 1-10 contain material related to Sections 9.1 – 9.2.

Use the following list of test scores for problems 1 – 3.

72 70 80 84 72 88 64 76 78 60

1. Find the mean.
2. Find the median.
3. Find the mode(s).
4. If Gene has a test average of 90 or higher he can be exempt from the final exam. He has taken four out of the five tests for the course. His scores on the four tests are 80, 95, 90, 92. What must he make on the fifth test to be exempt from the final exam?

Use the grading scale below for problem 5.

A = 90 – 100
B = 80 – 89
C = 70 – 79
D = 60 – 69
F below 60

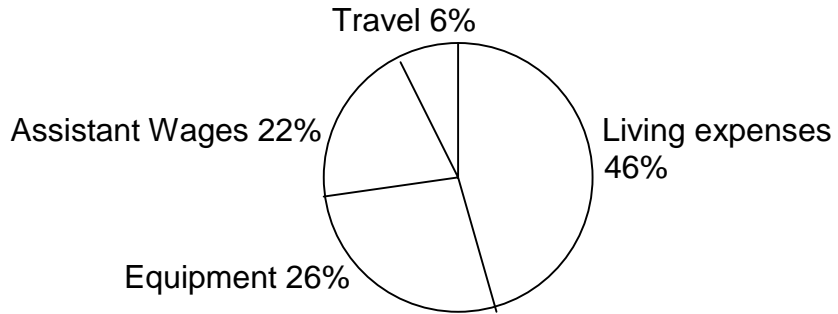
5. Sarah has the following scores: Tests: 80, 72, 88, 82

 Homework: 60, 80, 90, 100, 100

 Final exam: 74

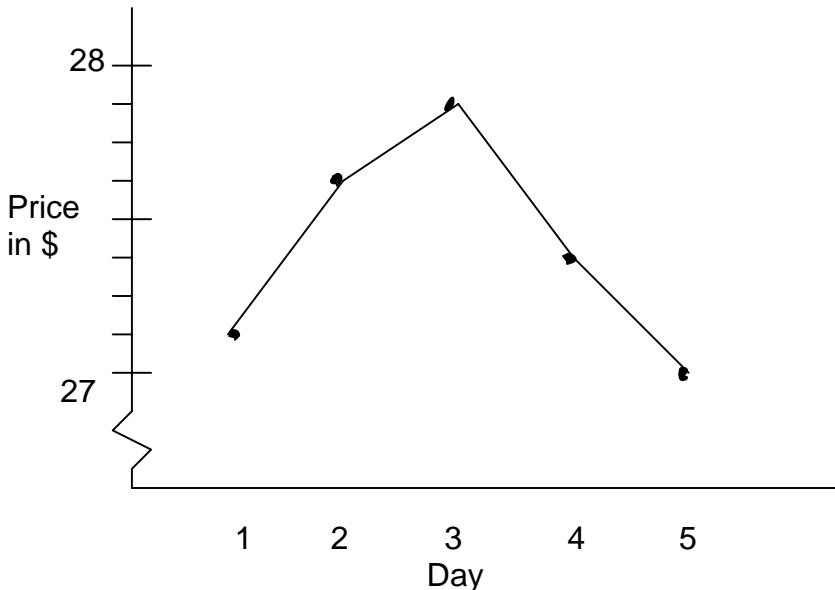
The instructor has decided that the test average is 50% of the final score, the homework average is 15% of the final score, and the final exam is the remaining 35% of the final score. What is Sarah's grade?

Use the pie chart for problems 6 and 7. The pie chart shows how a grant was spent.



6. If the grant amounted to \$84,000 what amount went towards living expenses?
7. What amount went towards equipment and travel combined?
8. Construct a vertical bar graph using the data shown on the pie graph above. Place percent along the vertical axis and the different expenditures along the horizontal axis.

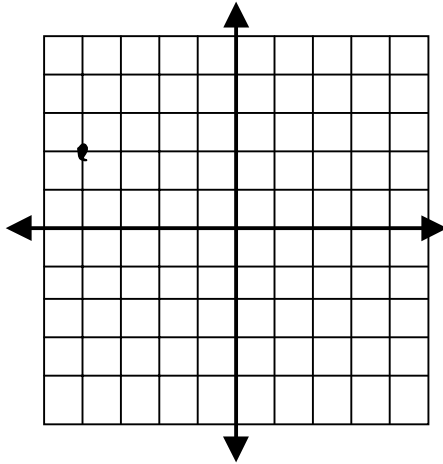
Use the line graph to answer problems 9 and 10. The graph shows the closing price of a particular stock over a five-day period.



9. Which day had the highest closing price?
10. What was the closing price on day 4?

Problems 11-20 contain material related to Sections 9.3 – 9.5.

11. Write the coordinates for the point shown.



12. State the quadrant in which $(58, -47)$ is located.

13. Calculate the distance between $(4, 2)$ and $(-6, 9)$. If the distance is irrational, then approximate the distance to the nearest tenth.

14. Determine whether $(6, -3)$ is a solution for $2x - y = 15$

For problems 15 – 17, find three solutions, then graph.

15. $x - y = 3$

16. $y = \frac{1}{3}x + 2$

17. $x = -4$

Use the following information to answer problems 18 and 19. The equation $p = 0.24r - 21,000$ describes the profit for a company, where r represents revenue.

18. Calculate the profit if the revenue is \$200,000.

19. Calculate the revenue required to break even (the point where the profit is \$0).

20. Calculate the perimeter of the figure with vertices at $(-2, 6)$ $(3, 6)$ $(3, -5)$ $(-4, -5)$. Round to the nearest tenth.