

1. Two sales representatives of a company travel regularly to meet their clients. Each value represents the distance, in miles, that the representatives had to travel on a randomly selected day of the week.

Sales Rep #1:	27	29	19	33	29	21	18	17	22	38	31	22	27
Sales Rep #2:	45	49	51	47	38	50	40	32	12	6	44	50	56

a) Make a box plot of the data for Sales Rep #1.

b) Make a histogram of the data for Sales Rep #1.

c) Make a back-to-back stem-and-leaf plot of the two Sales Reps.

d) Use your answer from part (c) to compare this data in a few sentences.

2. Here is some data comparing the age of a person and the percent chance of getting a speeding ticket at that age:

(16, 42) (23, 36) (33, 26) (40, 15) (51, 11) (60, 11) (71, 13)

a) Make a scatterplot for this data.

b) Find the equation of the line of regression.

c) Find the correlation coefficient,  $r$  for this data. Then use it to decide if there is a significant positive linear relationship, a significant negative linear relationship, or no significant linear relationship.

3. Which of the following is an accurate definition of the *standard deviation*?

- a) how spread out your data is
- b) the total deviations of your data points
- c)  $S_x$  after finding 1-var stats on the graphing calculator
- d) the distance every data point is from the mean
- e) the average distance your data points are away from the mean

4. Which of the following accurately describes the  $3^{rd}$  *quartile*?

- a) 3 quarters of your data is above this number
- b) a quarter of your data is below this number
- c) 25% of the data is less than or equal to that number
- d) 75% of your data is less than or equal to that number
- e) none of the above

Review!

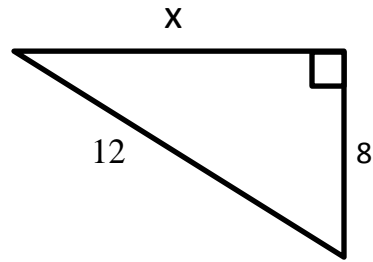
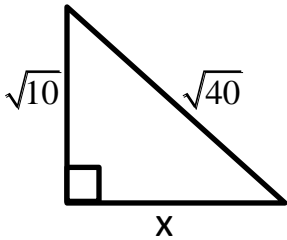
5. Solve for x.

a.  $\frac{5\sqrt{2x}}{4} = 10$

b.  $\sqrt{4x-8} + 6 = 0$

c.  $\sqrt{3x-2} = x$

6. Solve for the missing side. Do not use decimals!



7. Find the vertex of  $y = x^2 - 6x + 4$  by completing the square.

8. A diver's height is modeled by the equation  $h(t) = -16t^2 + 16t + 32$ , where  $h(t)$  is the height in feet, and  $t$  is the time in seconds. Find the time it takes for the diver to hit the water.