

Statistics and Probability - Answer Key

Page 2:

5) C

6) D

Page 3:

6) B

10) C

11) C

Page 4:

9) D

7) B

11) C

Page 5:

4) D

Page 6:

16) 35

17) 80 beats per minute

Page 7:

17) ORQ - See attached

Page 8:

21) ORQ - See attached

Page 9:

24) A

27) D

Page 10:

30) D

39) D

Page 11:

24) B

27) B

32) D

Page 12:

35) D

Page 13:

40) D

Page 14:

36) ORQ - See attached

a. For a total of 5 months, more than 500 pounds of newspaper was recycled per month.

b. $800 \text{ pounds} - 200 \text{ pounds} = 600 \text{ pounds}$

The range is 600 pounds.

c. $200, 300, 350, 400, 450, 600, 600, 700, 700, 800$

$$450 + 600 = 1,050 \div 2 = 525$$

The median is 525.

d. $200, 300, 300, 300, 350, 400, 450, 600, 600, 700, 700, 800$

$$400 + 450 = 850 \div 2 = 425$$

The new median is 425.

***Answers to parts a and b are on the graph!

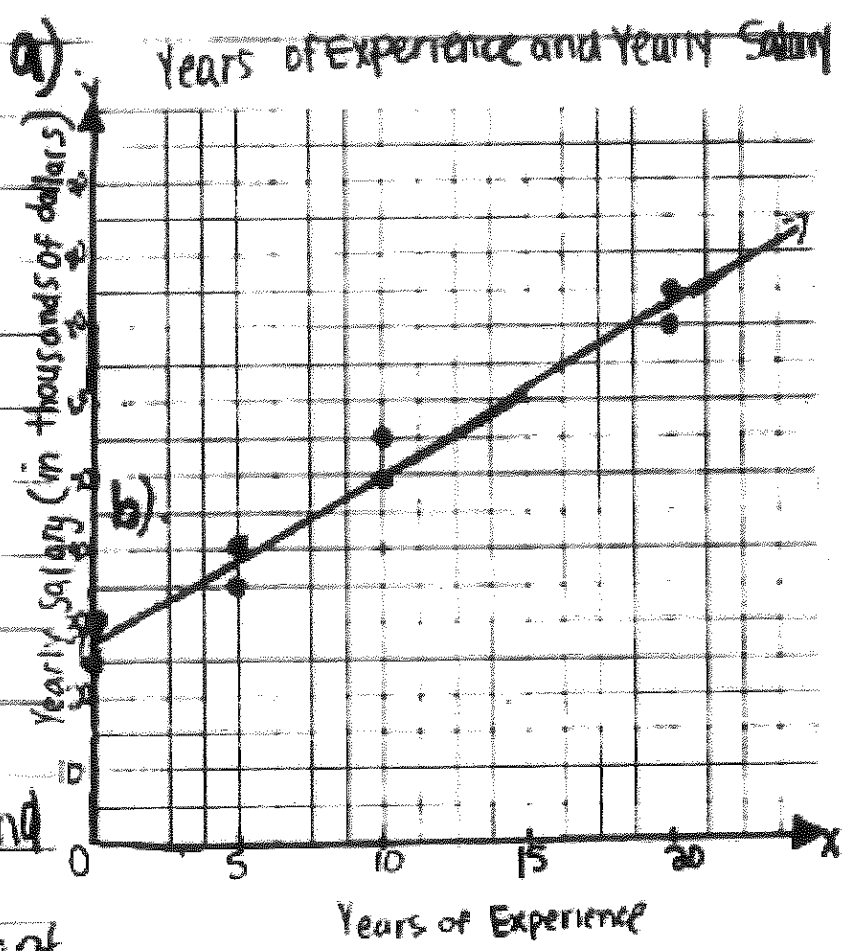
c. I predict the yearly salary for a person who has the same job and 15 years of work experience would be \$60,000 - \$65,000. I got my answer by finding where 15 years of experience would touch the line, which was between \$60,000 and \$65,000.

D)

$$\frac{y_2 - y_1}{x_2 - x_1} = \frac{75 - 50}{20 - 10} = \frac{25}{10} = \frac{5}{2}$$

$$y = \frac{5}{2}x + 27.5$$

I got my equation by finding the slope of my line using the slope formula $\frac{y_2 - y_1}{x_2 - x_1}$. Then I found where my line touched the y-axis to find my y-intercept.



A. $240 + 285 + 300 + 195 = 1020$

$1200 - 1020 = 180 \text{ students}$

B. $\frac{180}{1200} = .15$

$.15(100) = 15\%$

C. 360° in a circle

$\frac{300}{4} = 90^\circ$

$\frac{1200}{4} = 300$

300 students in earth science

Earth Science

D. $\frac{1800}{240} = 5$

$\frac{360^\circ}{5} = 72^\circ$