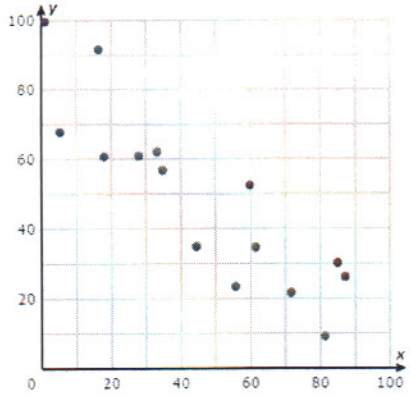
C12L6 Notes
Scatter Plots and Line of Best Fit

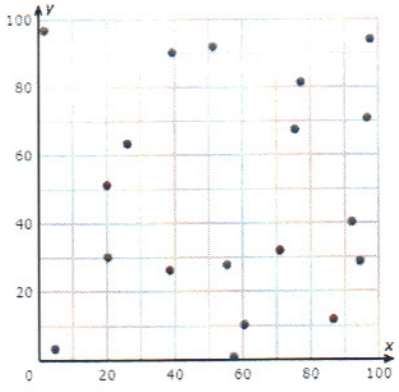
State whether the scatter plots show a positive trend (correlation), a negative trend (correlation), or no trend (correlation).

1.



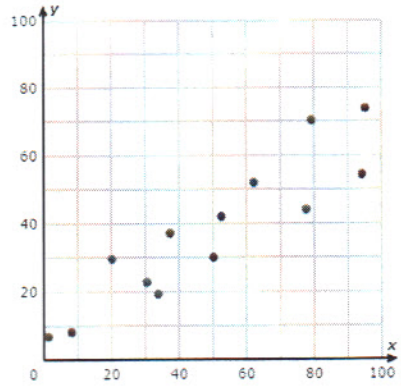
NEGATIVE TREND

2.



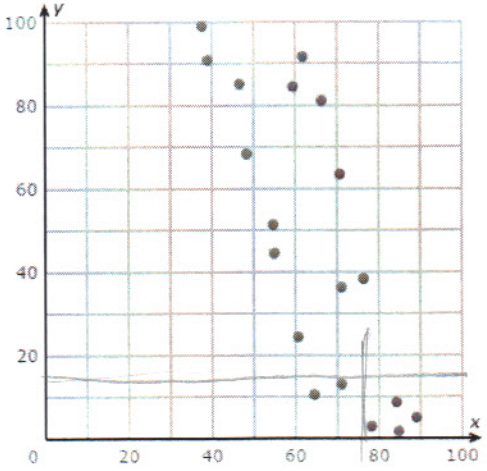
NO TREND

3.



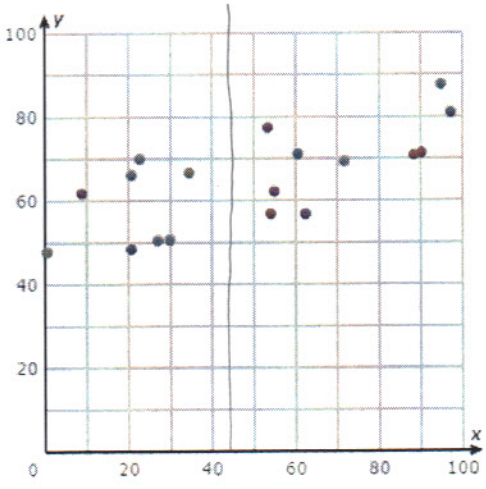
POSITIVE TREND

4. Based on the scatter plot below, which is a better prediction for x when y = 14? 79 or 5



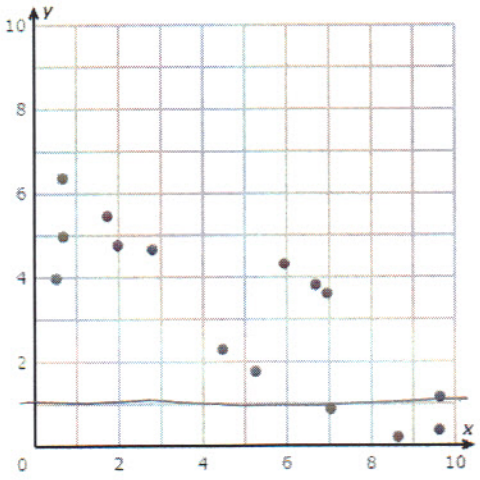
79

5. Based on the scatter plot below, which is a better prediction for y when x = 43? 60 or 0



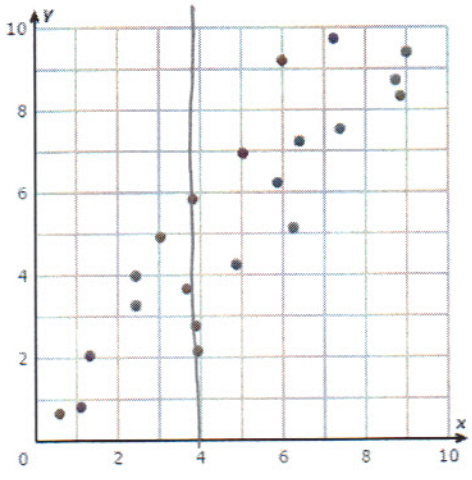
60

6. Based on the scatter plot below, which is a better prediction for x when y = 1? 3 or 10



10

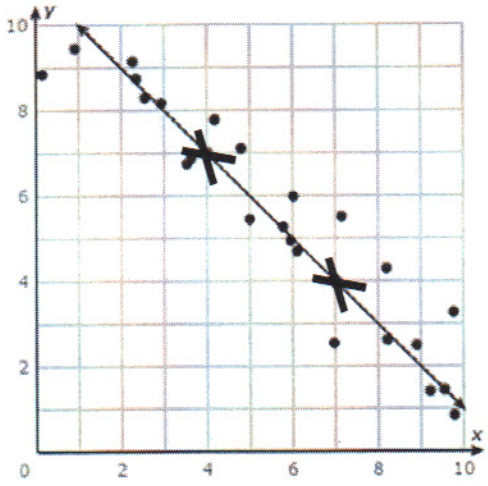
7. Based on the scatter plot below, which is a better prediction for y when x = 4? 9 or 4



4

State the equation of the trend line shown. Use the points indicated with an x. Write the equation in slope-intercept form.

8.



(4,7) (7,4)

$m = \frac{4-7}{7-4} = \frac{-3}{3} = -1$

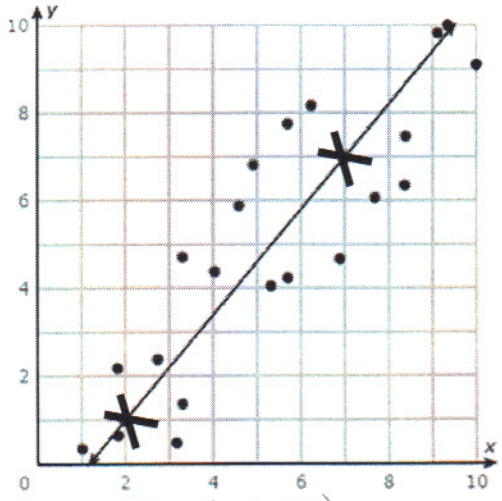
$y - 7 = -1(x - 4)$

$y - 7 = -1x + 4$

$+7 \qquad +7$

$y = -1x + 11$

9.



(2,1) (7,7)

$m = \frac{7-1}{7-2} = \frac{6}{5}$

$y-1 = \frac{6}{5}(x-2)$

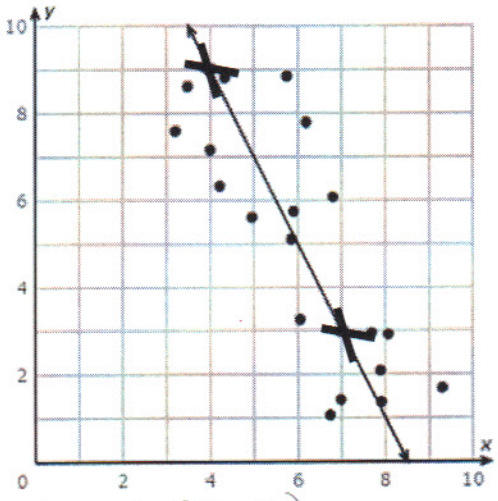
$y-1 = \frac{6}{5}x - \frac{12}{5}$

$5y-5 = 6x-12$

$5y = 6x-7$

$y = \frac{6}{5}x - \frac{7}{5}$

10.



(4,9) (7,3)

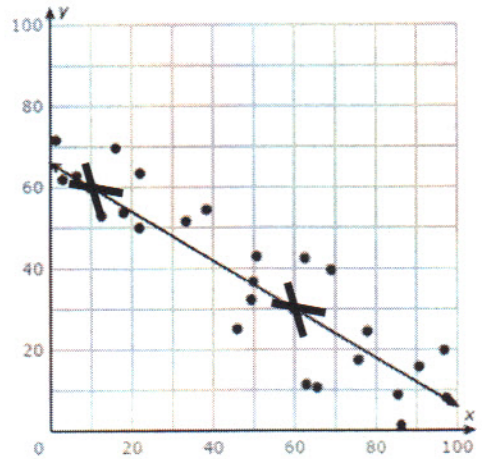
$m = \frac{3-9}{7-4} = \frac{-6}{3} = -2$

$y-9 = -2(x-4)$

$y-9 = -2x+8$

$y = -2x+17$

11.



(10, 60) (60, 30)

$m = \frac{30-60}{60-10} = \frac{-30}{50} = -\frac{3}{5}$

$y-60 = -\frac{3}{5}(x-10)$

$y-60 = \frac{-3}{5}x + \frac{30}{5}$

$5y-300 = -3x+30$

$5y = -3x+330$

$y = -\frac{3}{5}x + 66$