

READY, SET, GO!

Name _____

Period _____

Date _____

READY

Topic: Estimating the line of best fit

Examine the scatterplot below. Imagine that you drew a straight line through the general pattern of the points, keeping as close as possible to all points with as many points above the line as below.

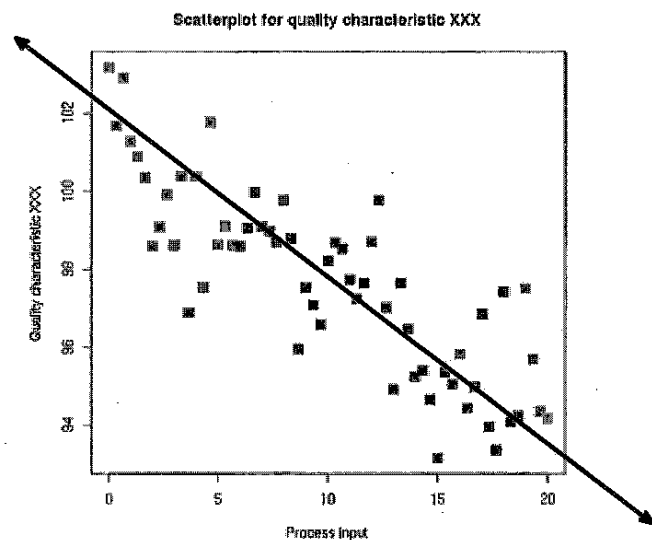
Answers will vary for #1 and #2. However they should be close to the answers

1. Predict a possible y-intercept and slope for the line you imagined.

- a. y-intercept: 102 (between 101-104)
 b. slope: $-\frac{2}{5}$ (must be negative)

2. Sketch the line that you imagined for question #1 and write an equation for that line.

Answer: $y = -\frac{2}{5}x + 102$



© 2012 http://en.wikipedia.org/wiki/File:Scatter_diagram_for_quality_characteristic_XXX.svg

SET

Topic: Estimating the correlation coefficient

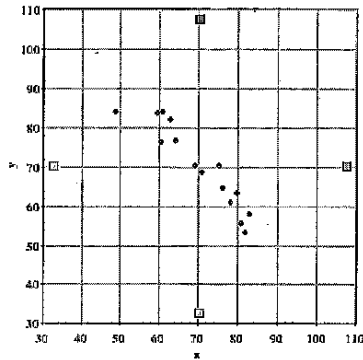
Match the following scatterplots with the correct correlation coefficient.

Possible correlation coefficients:

- a. 0.05 b. 0.97 c. -0.94 d. -0.49 e. 0.68 f. -0.25

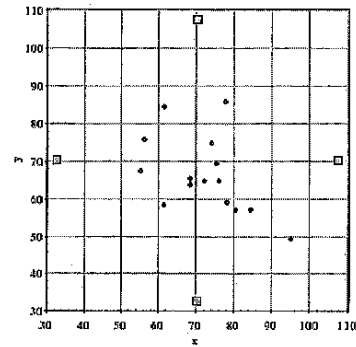
3.

Answer:
 c.



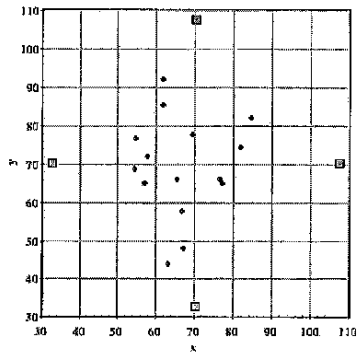
4.

Answer:
 d.



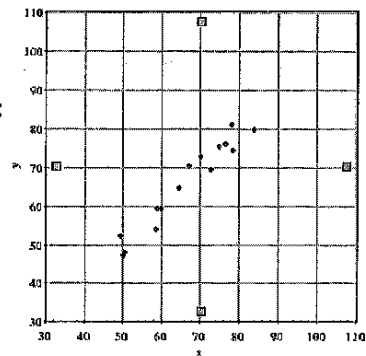
5.

Answer:
 a.



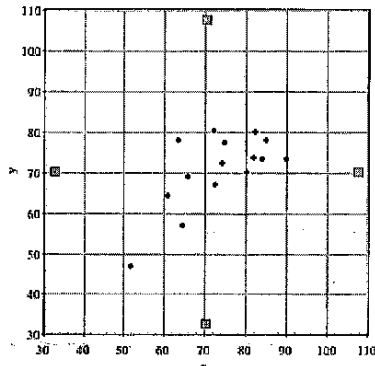
6.

Answer:
 b.



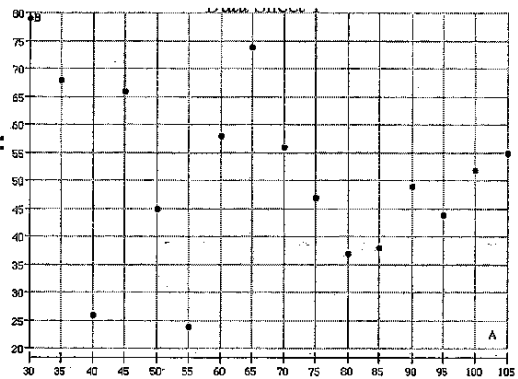
7.

Answer:
 e.



8.

Answer:
 f.



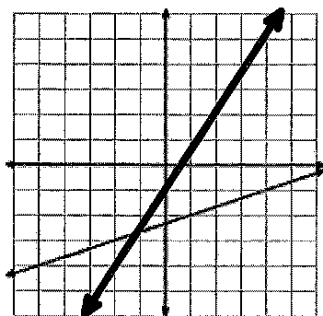
GO

Topic: Visually comparing slopes of lines.

Follow the prompt to sketch the graph of a line on the same grid with the given characteristics.

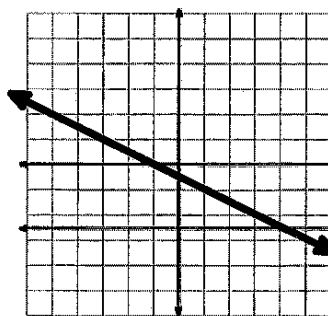
9. A greater slope

Answers will vary. Line should be positive and steeper than given line. (Example shown.)



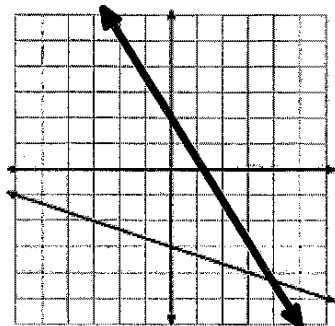
10. A lesser slope

Answers will vary. Line should be negative. (Example shown.)



11. A larger y-intercept and a lesser slope

Answers will vary. Line should be negative and steeper than given line and must cross the y axis at a higher point than -3. (Example shown.)



12. Slope is the opposite reciprocal.

Answers may vary. Line must have a slope of $-\frac{2}{3}$. The y intercept can be anywhere. (Example shown.)

