Parallel & Perpendicular Lines & Scatter Plots

1. Parallel lines …

a. Have opposite slopes and do intersect

b. Have the same slope and do not intersect

c. Have opposite reciprocal slopes and do not intersect

d. Have opposite reciprocal slopes and intersect at a right angle

2. Perpendicular lines …

a. Have opposite slopes and do intersect

b. Have the same slope and do not intersect

c. Have opposite reciprocal slopes and do not intersect

d. Have opposite reciprocal slopes and intersect at a right angle

3. Describe y - 2x = 7 and y = 2x - 1.

a. Parallel

b. Perpendicular

c. Neither

d. Not enough information given

4. Describe y = 6x - 2 and y - 3x = 4.

a. Parallel

b. Perpendicular

c. Neither

d. Not enough information given

5. What is the slope of a line that is perpendicular to y + ½x = 3?

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6. What is the slope of a line that is parallel to y – ¼x = 7?

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7. Which of the following lines is ***not*** perpendicular to x – y = 7 ?

a. y = -3x

b. -y = 3x + 2

c. 3x – y = 8

d. 3x + y = 9

8. Choose the equation of the line that passes through (-3, 5) and is parallel to the graph y = 2x – 4.

a. y = - ½x + 5

b. y = - ½x + 11

c. y = 2x + 5

d. y = 2x + 11

9. Which line is perpendicular to y = 4?

a. x = 0

b. y = -4

c. y = 4

d. not enough information given

10. Which line is parallel to x = -3?

a. x = 0

b. y = -4

c. y = 4

d. not enough information given

Use the scatter plot to answer questions 11 – 15.

11. Determine what relationship, if any, exists in the data.

a. Positive correlation

b. Negative correlation

c. No correlation

d. None of the above

12. Use the points ( 2 , 7 ) and ( 7, 2 ) to find the slope of the line of fit for the given data.

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13. Using the points ( 2 , 7 ) and ( 7, 2 ) what is the equation in slope-intercept form of the line of fit for the given data?

a. y = -x – 5

b. y = -x + 5

c. y = -x – 9

d. y = -x + 9

14. Choose the description that describes the data.

a. The more you floss the more cavities you have.

b. The more you floss the fewer cavities you have.

c. The less you floss the fewer cavities you have.

d. None of the above.

15. Using the line of fit, predict the number of cavities you could have if you floss 4 times a week.

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