

1pt Each / 19

Name: Key

Write the slope-intercept form of an equation that passes through the given point and is perpendicular to the graph of the equation.

20. $(2, -2), y = -5x + 1$

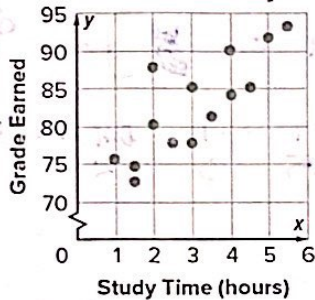
$$y = \frac{1}{5}x - \frac{12}{5}$$

21. $(3, 6), 3x + 2y = 14$

$$y = \frac{2}{3}x + 4$$

Determine whether the graph shows a positive correlation, a negative correlation, or no correlation. If there is a positive or negative correlation, describe its meaning in the situation.

22. Final Exam Analysis



Positive correlation;
AS the study time increases,
the grade earned increases.

Determine whether each situation illustrates a correlation only, a correlation and causation, or neither.

23. A store owner finds there is a positive correlation between the number of candy bars sold and boxes of oatmeal sold in a month.

Correlation only

Find the inverse of each function.

24. $f(x) = \frac{1}{3}x - 10$

$$f^{-1}(x) = 3x + 30$$

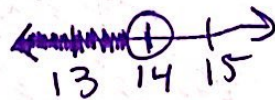
25. $f(x) = 4x + 3$

$$f^{-1}(x) = \frac{x}{4} - \frac{3}{4}$$

Solve the inequality. Graph the solution on a number line.

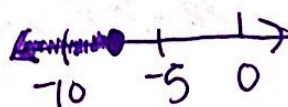
26. $x - 4 < 10$

$$x < 14$$



27. $-1 \geq z + 6$

$$z \leq -7$$



Solve the inequality.

28. $5x \geq 25$

$$x \geq 5$$

29. $\frac{c}{12} > -6$

$$c > -72$$

30. $3(2x + 1) < 6x + 3$

No Solution

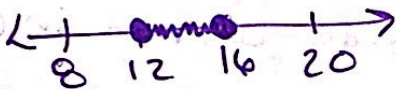
31. $8 + 10b < 6(0.5x - 1)$

$$b < -2$$

Solve the compound inequality and graph the solution set.

32. $4 \leq p - 8$ and $p - 14 \leq 2$

$$12 \leq p \leq 16$$



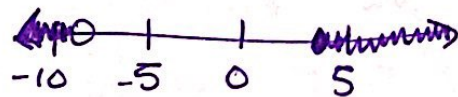
Solve the given inequality.

34. $|p - 2| < 8$

$$-6 < p < 10$$

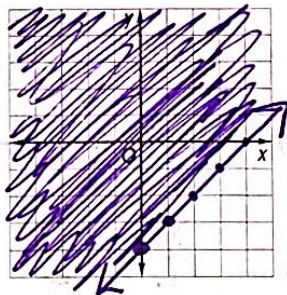
33. $y + 5 \geq 9$ or $y + 4 < -5$

$$y \geq 4 \text{ or } y < -9$$

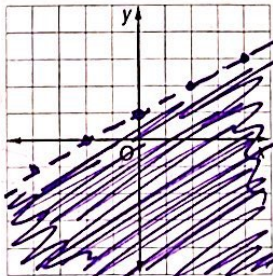


Graph each inequality on a coordinate plane.

36. $y \geq x - 4$



37. $y < \frac{1}{2}x + 1$



Find the inverse of each relation.

38. $\{(1,3), (-2,5), (0,-7), (-14,-3)\}$

$$\{(3,1), (5,-2), (-7,0), (-3,-14)\}$$