

Name _____

1 Stan's solution to an equation is shown below.

Given: $n + 8(n + 20) = 110$

Step 1: $n + 8n + 20 = 110$

Step 2: $9n + 20 = 110$

Step 3: $9n = 110 - 20$

Step 4: $9n = 90$

Step 5: $\frac{9n}{9} = \frac{90}{9}$

Step 6: $n = 10$

Which statement about Stan's solution is true?

- A Stan's solution is correct.
- B Stan made a mistake in Step 1.
- C Stan made a mistake in Step 3.
- D Stan made a mistake in Step 5.

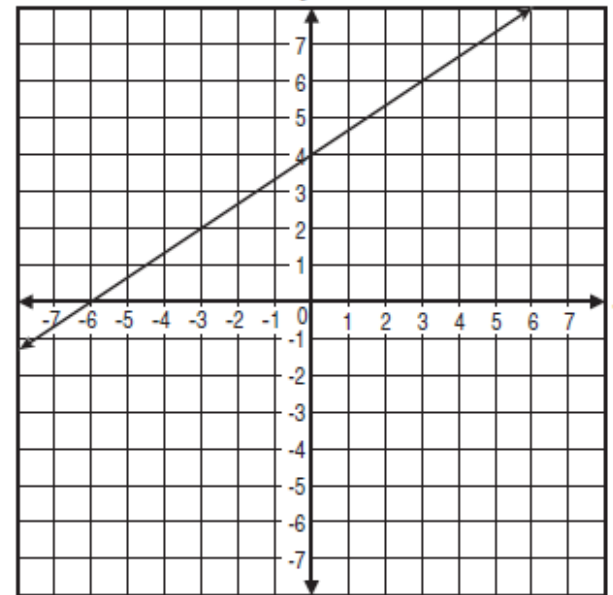
2 What is the y-intercept of the graph of $4x + 2y = 12$?

- A -4 C 6
- B -2 D 12

3 Which point lies on the line defined by $3x + 6y = 2$?

- A (0, 2) C $\left(1, -\frac{1}{6}\right)$
- B (0, 6) D $\left(1, -\frac{1}{3}\right)$

4 Which equation represents the line shown in the graph below?



- A $y = \frac{2}{3}x + 4$
- B $y = \frac{2}{3}x - 6$
- C $y = \frac{3}{2}x + 4$
- D $y = \frac{3}{2}x - 6$

5 What is the x-intercept of the line defined by $-2x + 3y = 12$?

- A 6
- B 4
- C -4
- D -6

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- 6** The data in the table show the cost of renting a bicycle by the hour, including a deposit.

Renting a Bicycle

Hours (h)	Cost in dollars (c)
2	15
5	30
8	45

If hours, h , were graphed on the horizontal axis and cost, c , were graphed on the vertical axis, what would be the equation of a line that fits the data?

- A $c = 5h$ C $c = 5h + 5$
- B $c = \frac{1}{5}h + 5$ D $c = 5h - 5$
- 7** The equation of line l is $6x + 5y = 3$, and the equation of line q is $5x - 6y = 0$. Which statement about the two lines is true?
- A Lines l and q have the same y -intercept.
- B Lines l and q are parallel.
- C Lines l and q have the same x -intercept.
- D Lines l and q are perpendicular.

- 8** Some ordered pairs for a linear function of x are given in the table below.

x	y
1	1
3	7
5	13
7	19

Which of the following equations was used to generate the table above?

- A $y = 2x + 1$ C $y = 3x - 2$
- B $y = 2x - 1$ D $y = 4x - 3$
- 9** Which equation is equivalent to $3[7x - 4(x - 3)] + 1 = 16$?
- A $9x - 2 = 16$ C $17x - 2 = 16$
- B $9x + 37 = 16$ D $17x + 13 = 16$
- 10** What is the solution for this equation?
- $$|2x - 3| = 5$$
- A $x = -4$ or $x = 4$ C $x = -1$ or $x = 4$
- B $x = -4$ or $x = 3$ D $x = -1$ or $x = 3$