

Name: _____

ID: A

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Algebra Week 7 Homework

Multiple Choice

Identify the choice that best completes the statement or answers the question.

Find the slope and y-intercept of the line.

1. $14x + 4y = 24$

- a. $-\frac{2}{7}; 6$
- b. $-\frac{7}{2}; 6$
- c. $-\frac{7}{2}; \frac{1}{6}$
- d. $\frac{7}{2}; -6$

2. $8x + 2y = -116$

- a. $-4; -\frac{1}{58}$
- b. $4; 58$
- c. $-4; -58$
- d. $-\frac{1}{4}; -58$

3. $12x + 2y = -24$

- a. $-\frac{1}{6}; -12$
- b. $-6; -12$
- c. $6; 12$
- d. $-6; -\frac{1}{12}$

4. $14x + 6y = -30$

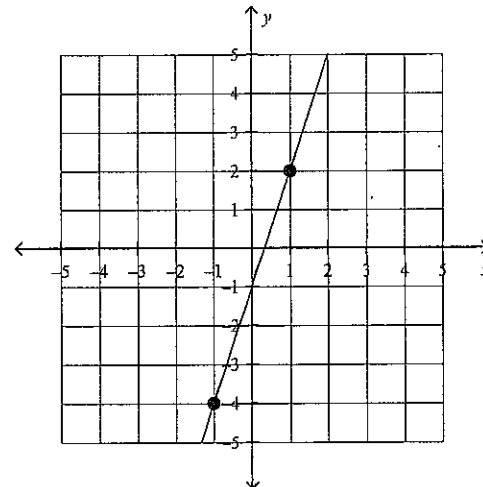
- a. $-\frac{7}{3}; -5$
- b. $-\frac{7}{3}; -\frac{1}{5}$
- c. $\frac{7}{3}; 5$
- d. $-\frac{3}{7}; -5$

5. $20x + 5y = 20$

- a. $4; -4$
- b. $-4; \frac{1}{4}$
- c. $-4; 4$
- d. $-\frac{1}{4}; 4$

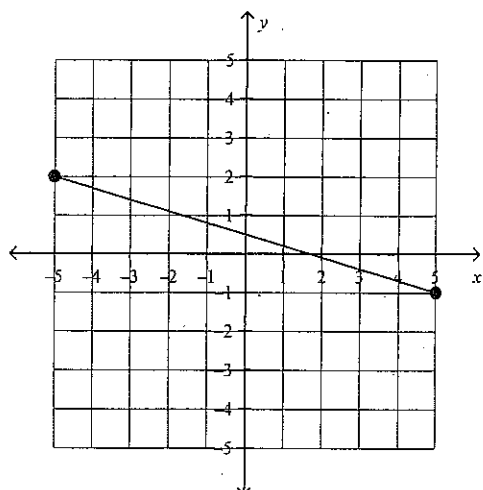
Write the slope-intercept form of the equation for the line.

6.



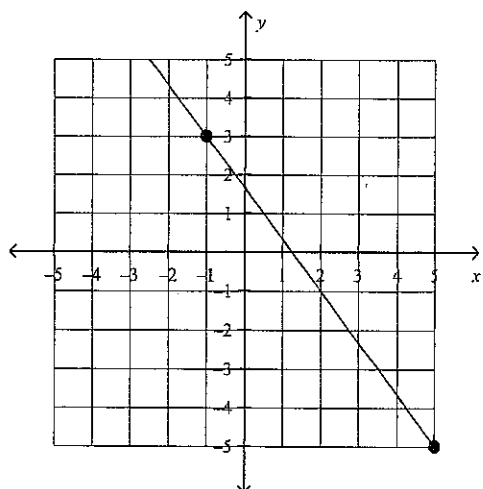
- a. $y = 3x - 1$
- b. $y = -3x - 1$
- c. $y = \frac{1}{3}x + 1$
- d. $y = \frac{1}{3}x - 1$

7.



- a. $y = -\frac{10}{3}x + \frac{1}{2}$
- b. $y = \frac{3}{10}x + \frac{1}{2}$
- c. $y = -\frac{3}{10}x + \frac{1}{2}$
- d. $y = \frac{1}{2}x + \frac{3}{10}$

8.



- a. $y = \frac{4}{3}x + \frac{5}{3}$
- b. $y = -\frac{3}{4}x + \frac{5}{3}$
- c. $y = -\frac{4}{3}x + \frac{5}{3}$
- d. $y = \frac{5}{3}x + \frac{4}{3}$

Write an equation in point-slope form for the line through the given point with the given slope.

- 9. $(10, -9); m = -2$
 - a. $y - 10 = -2(x + 9)$
 - b. $y - 9 = -2(x + 10)$
 - c. $y - 9 = -2(x - 10)$
 - d. $y + 9 = -2(x - 10)$
- 10. $(-7, -2); m = \frac{1}{2}$
 - a. $y - 2 = \frac{1}{2}(x + 7)$
 - b. $y + 2 = \frac{1}{2}(x + 7)$
 - c. $y + 7 = \frac{1}{2}(x + 2)$
 - d. $y - 2 = \frac{1}{2}(x - 7)$
- 11. $(4, -10); m = \frac{1}{2}$
 - a. $y - 10 = \frac{1}{2}(x - 4)$
 - b. $y - 10 = \frac{1}{2}(x + 4)$
 - c. $y - 4 = \frac{1}{2}(x + 10)$
 - d. $y + 10 = \frac{1}{2}(x - 4)$
- 12. $(-6, -8); m = -\frac{5}{4}$
 - a. $y - 8 = -\frac{5}{4}(x - 6)$
 - b. $y + 8 = -\frac{5}{4}(x + 6)$
 - c. $y + 6 = -\frac{5}{4}(x + 8)$
 - d. $y - 8 = -\frac{5}{4}(x + 6)$