

NAME: \_\_\_\_\_

*P.I. A.A.34: Write the equation of a line, given its slope and the coordinates of a point on the line*

1. Find an equation of the line passing through the point (2, 7) with slope  $m = 6$ .

[A]  $y = 6x - 5$       [B]  $y = 6x - 40$

[C]  $y = \frac{1}{6}x - \frac{20}{3}$       [D]  $y = \frac{1}{6}x - \frac{5}{6}$

2. Find an equation of the line passing through the point (-5, 3) with slope  $m = 2$ .

[A]  $y = \frac{1}{2}x + \frac{13}{2}$       [B]  $y = \frac{1}{2}x - \frac{11}{2}$

[C]  $y = 2x - 11$       [D]  $y = 2x + 13$

3. Find an equation of the line passing through the point (-6, 5) with slope  $m = 5$ .

[A]  $y = 5x - 31$       [B]  $y = 5x + 35$

[C]  $y = \frac{1}{5}x - \frac{31}{5}$       [D]  $y = \frac{1}{5}x + 7$

4. Find an equation of the line passing through the point (7, 6) with slope  $m = 2$ .

[A]  $y = 2x - 5$       [B]  $y = \frac{1}{2}x - 4$

[C]  $y = \frac{1}{2}x - \frac{5}{2}$       [D]  $y = 2x - 8$

5. Find an equation of the line passing through the point (4, 3) with slope  $m = 3$ .

[A]  $y = 3x - 9$       [B]  $y = \frac{1}{3}x - \frac{5}{3}$

[C]  $y = 3x - 5$       [D]  $y = \frac{1}{3}x - 3$

6. Write an equation of the line that passes through the point (3, 5) with slope -4.

[A]  $y = -4x + 17$       [B]  $y = 4x + 17$

[C]  $y = -4x + 5$       [D]  $y = 4x + 5$

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7. Write an equation of the line that passes through the point  $(-2, 4)$  with slope 1.

[A]  $y = x + 4$       [B]  $y = -x + 4$

[C]  $y = x + 6$       [D]  $y = -x + 6$

8. Write an equation of the line that passes through the point  $(-5, -6)$  with slope 3.

[A]  $y = 3x - 6$       [B]  $y = 3x + 9$

[C]  $y = -3x + 9$       [D]  $y = -3x - 6$

9. Write an equation of the line that passes through the point  $(6, 2)$  with slope 3.

[A]  $y = -3x + 2$       [B]  $y = -3x - 16$

[C]  $y = 3x - 16$       [D]  $y = 3x + 2$

10. Write an equation of the line that passes through the point  $(4, -1)$  with slope  $-2$ .

[A]  $y = -2x - 1$       [B]  $y = 2x - 1$

[C]  $y = -2x + 7$       [D]  $y = 2x + 7$

11. Write an equation of the line that passes through the point  $(-1, -3)$  with slope 2.

[A]  $y = -2x - 3$       [B]  $y = 2x - 3$

[C]  $y = -2x - 1$       [D]  $y = 2x - 1$

12. Which equation is correct for a line through  $(5, -3)$  with slope 0.75?

[A]  $y = \frac{3}{4}x - \frac{27}{4}$       [B]  $y = \frac{3}{4}x - \frac{4}{5}$

[C]  $y = \frac{3}{4}x - 3$       [D]  $y = -\frac{3}{4}x + \frac{27}{4}$

[E]  $y = -\frac{3}{4}x + \frac{4}{5}$

- [1] A
- [2] D
- [3] B
- [4] D
- [5] A
- [6] A
- [7] C
- [8] B
- [9] C
- [10] C
- [11] D
- [12] A