

Name _____

**MATH
1010**

Graphing Linear Equations – EXTENSION

Write an equation of the line that passes through the given point and is parallel to the given line. Use a graphing calculator to check your answer.

1. $(1, 3); y = 2x + 6$

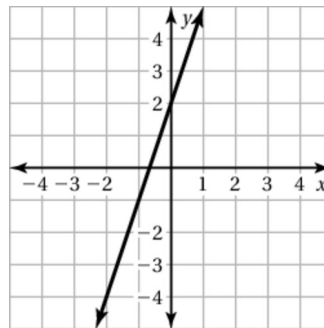
2. $(-2, -2); y = -3x + 7$

3. $(5, 7); y = \frac{3}{5}x + 6$

4. $(2, -5); y = -\frac{7}{2}x - 2$

Write an equation of the line that passes through the given point and is parallel to the line shown in the graph.

5. $(1, 2)$



6. $(4, 7)$

7. $(0, -9)$

8. $(-6, -15)$

Write an equation of the line that passes through the given point and is perpendicular to the given line.

9. $(1, 1); y = \frac{1}{2}x + 4$

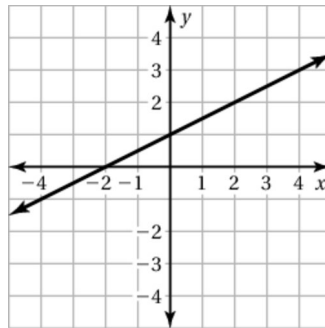
10. $(-3, 7); y = 3x - 4$

11. $(-2, -8); y = -2x - 7$

12. $(-8, 10); y = -\frac{4}{7}x + 2$

Write an equation of the line that passes through the given point and is perpendicular to the line shown in the graph.

13. $(4, -4)$



14. $(-5, 2)$

15. $(0, 0)$

16. $(0, 6)$