Name _____ Hour _____ Date _____

Algebra I
Point-Slope Form Worksheet

Give an equation in point-slope form that satisfies the given information.

1. Passes through (2, 3) and has slope of $-\frac{1}{2}$.

2. Passes through (-1, 4) and m = 4.

3. Passes through (0, 2) and has slope of –5/3.

4. Passes through (4, -2) and m = 0.

5. Passes through (-4, 6) and (-2, 5)

6. Passes through (-1, -7) and (1, 3)

Give the slope of each of the following lines. Name a point on each line.

7. y + 2 = 2/3 (x – 4)

8. y – 3 = $\frac{1}{2}$ (x – 3)
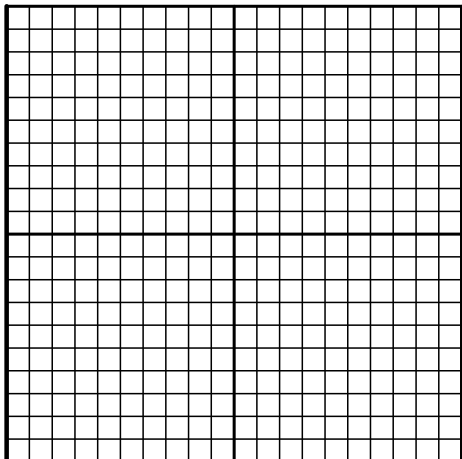
9. y + 5 = $\frac{1}{4}$ (x + 2)

10. Y = 2 (x + 3)

11. y – 8 = -3 (x + 1)

12. Y + 3 = -1/5 x

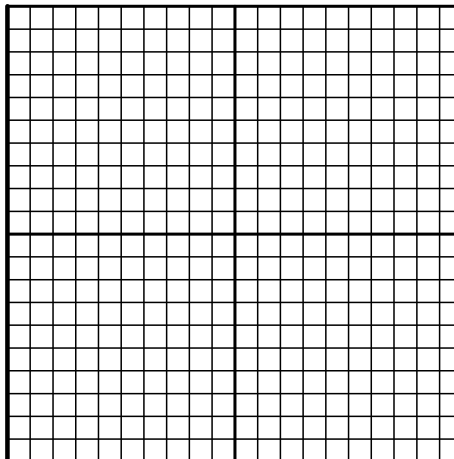# Graph each of the following lines by first giving the point and the slope.
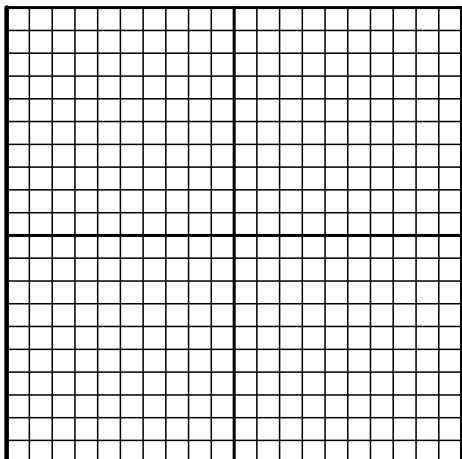
13. $y + 2 = 1/3 \, (x + 1)$

Point _____ Slope _____

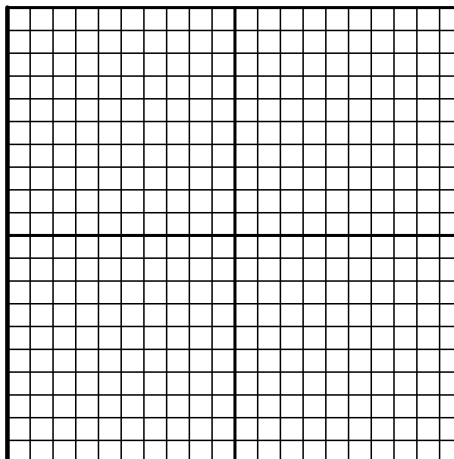14. $y + 1 = -\frac{1}{2} \, (x - 3)$

Point _____ Slope _____
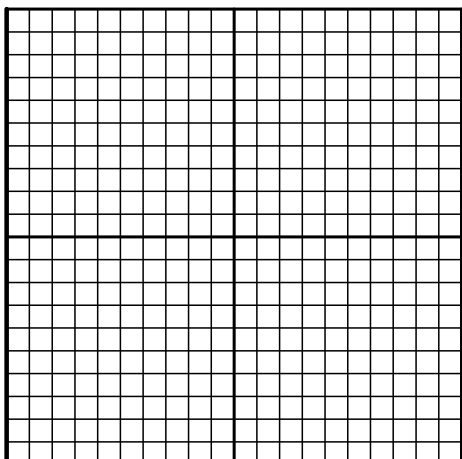
15. $y - 3 = -2 \, (x - 4)$

Point _____ Slope _____

16. $y - 5 = 3 \, x$

Point _____ Slope _____

17. $y + 3 = 0 \, (x - 3)$

Point _____ Slope _____

18. $y - 1 = -5/2 \, (x + 2)$

Point _____ Slope _____