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 $(-2, 5)$
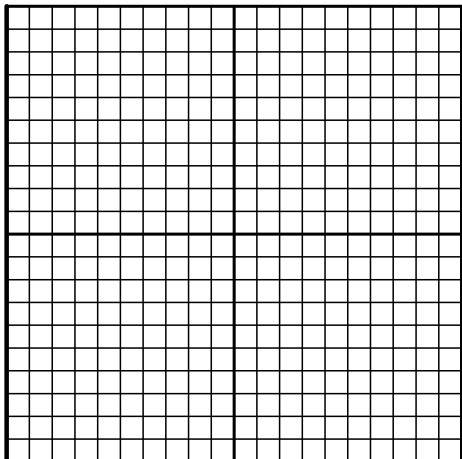
6. Passes through $(-1, -7)$ and $(1, 3)$

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. $Y + 3 = -1/5 \, x$

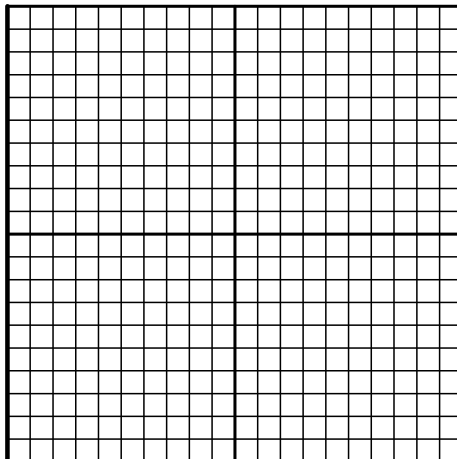# Graph each of the following lines by first giving the point and the slope.

13. y + 2 = 1/3 (x + 1)

Point _____ Slope _____

14. y + 1 = -½ (x – 3)
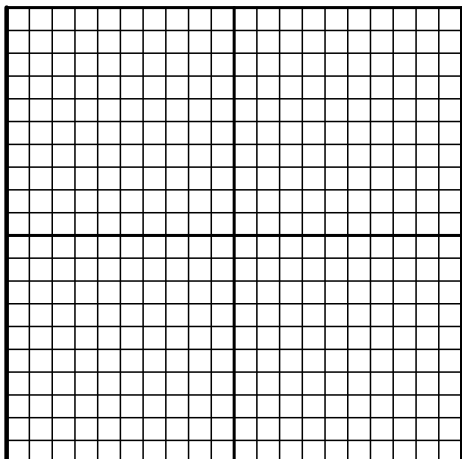
Point _____ Slope _____

15. y – 3 = -2 (x – 4)

Point _____ Slope _____

16. y – 5 = 3 x

Point _____ Slope _____
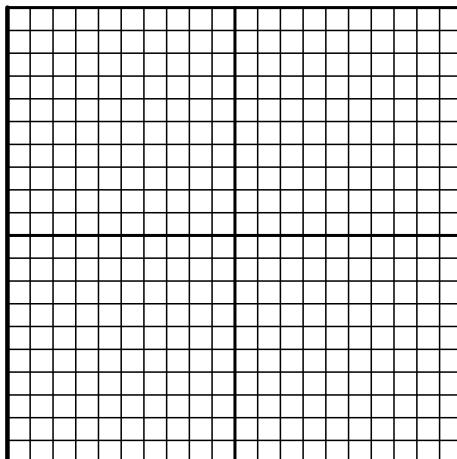
17. y + 3 = 0 (x –3)

Point _____ Slope _____

18. y – 1 = -5/2 (x + 2)

Point _____ Slope _____