

**Problem Set**

Graph each of the equations in the Problem Set on a different pair of  $x$ - and  $y$ -axes.

1. Graph the equation:  $y = -6x + 12$ .
2. Graph the equation:  $9x + 3y = 18$ .
3. Graph the equation:  $y = 4x + 2$ .
4. Graph the equation:  $y = -\frac{5}{7}x + 4$ .
5. Graph the equation:  $\frac{3}{4}x + y = 8$ .
6. Graph the equation:  $2x - 4y = 12$ .
7. Graph the equation:  $y = 3$ . What is the slope of the graph of this line?
8. Graph the equation:  $x = -4$ . What is the slope of the graph of this line?
9. Is the graph of  $4x + 5y = \frac{3}{7}$  a line? Explain.
10. Is the graph of  $6x^2 - 2y = 7$  a line? Explain.