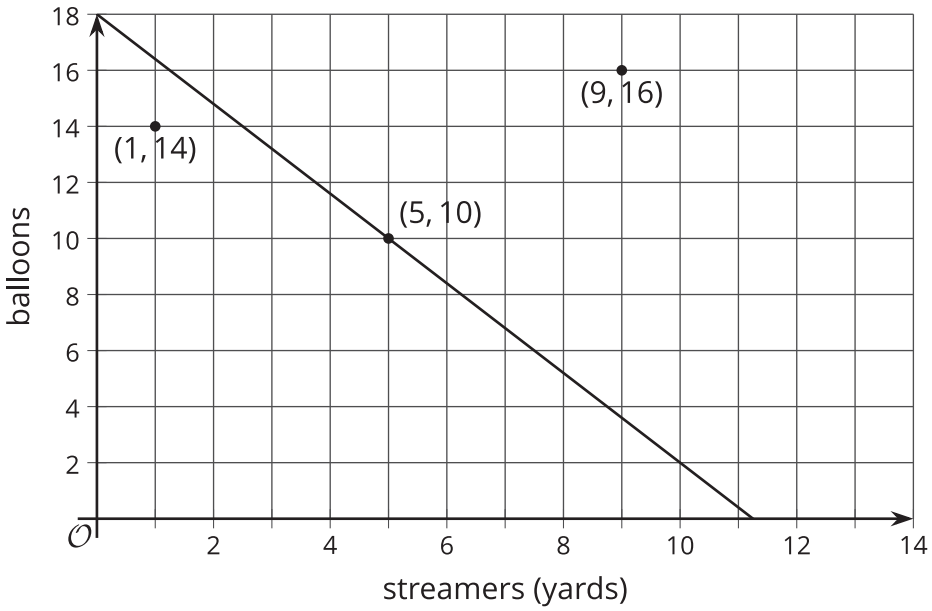
Slopes and Intercepts

Let's analyze parts of a graph.

11.1 Notice and Wonder: Balloons and Streamers

What do you notice? What do you wonder?



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11.2 Card Sort: Matching Matching

Your teacher will give you a set of cards.

1. Begin with the graph cards, face up. Take turns with your partner to name three things in each graph:
   - slope
   - x-intercept
   - y-intercept
2. For each graph that your partner chooses, see if you agree with your partner's thinking. If you agree, write down the answers. If you disagree, discuss your thinking and work to reach an agreement.
3. Deal out the equation cards face up, leaving the graph cards face up as well. Take turns with your partner to match each graph with an equation.
   a. For each match that you find, explain to your partner how you know it's a match.
   b. For each match that your partner finds, listen carefully to the explanation. If you disagree, discuss your thinking and work to reach an agreement.

11.3 Part of Linear Equations

For each equation, identify the slope and y-intercept of its graph.

1. $y = 3x - 8$

2. $y = 10 - 2x$

3. $y = \frac{x}{2} + 1$

4. $y + 1 = 9x$

5. $y = \frac{1}{3}(9x + 12)$