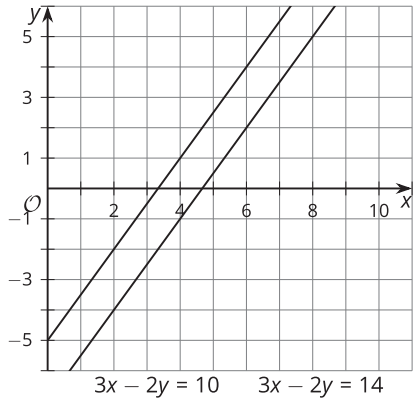
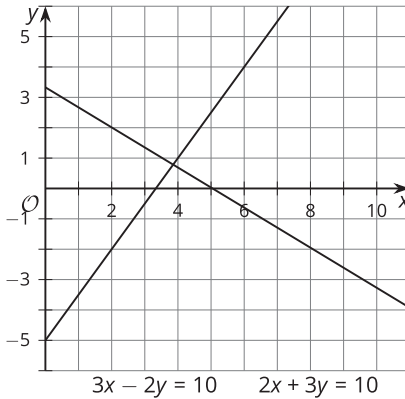
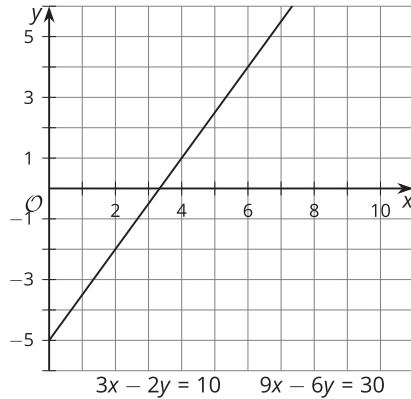


Unit 2 Lesson 17: Number of Solutions in One-Variable Equations

1 Notice and Wonder: Three Graphs (Warm up)

Student Task Statement

What do you notice? What do you wonder?



2 How Many Answers?

Student Task Statement

How many values of x make each equation true?

1. $3x + 1 = 10$

2. $2x + 12 = 2x + 10 + 2$

3. $2x = x + 2$

4. $3(x + 4) = 3x + 4$

5. $\frac{2x+6}{2} = x + 6$

6. $0 = 0$

7. $x + 3x - 4 = 7(x - \frac{4}{7})$

8. $0 = 6$

With your partner, discuss what you notice about the equations based on the number of solutions they have.

3 Write, Trade, Check

Student Task Statement

1. Write an equation that has either 1, 0, or infinite solutions.
2. Trade your equation with your partner. Solve the equation you are given and determine the number of solutions.
3. Take turns explaining your reasoning with your partner.
4. Repeat the process with a new equation.