

Name: _____ Teacher: _____ School: _____

Grade 8: Lesson 11 Estimate Solutions by Inspection

Complete the following exercises. You may use a calculator as needed.

1. What conclusion can you make about the system of equations?

$$6y = 12x + 36$$

$$15y = 45x + 60$$

The slope of the first equation is _____ the slope of the second equation.

The y-intercept of the first equation is _____ the y-intercept of the second equation.

The system of equations has _____ solution(s).

2. How many solutions does this system have?

$$y = 3x + 14$$

$$4y = 12x + 64$$

3. How many solutions does this system have?

$$x + 3y = 0$$

$$9y = -3x$$

4. Ben says this system of equations has one solution. Is he correct? Explain.

$$y = \frac{1}{4}x - 4$$

$$y = \frac{1}{4}x - 14$$

5. How many solutions does this system have?

$$-6x + 18y = 264$$

$$-12x - 36y = 130$$

6. How many solutions does this system have?

$$y = 4x + 5$$

$$y = -4x + 5$$

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