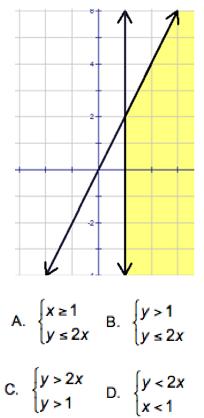
**Coordinate Algebra Support**

**Form 201**

**EOCT Review Practice– Unit 2**

**Use the following graph for question 1.**



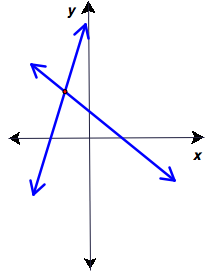
1. **Which system of inequalities is represented by the graph shown?**

**Use the following information for question 2.**

|  |  |
| --- | --- |
| **2(x + 7) + 3x = 12** | **Given** |
| **2x + 14 + 3x = 12** | **?** |
| **5x + 14 = 12** | **Simplify** |
| **5x = -2** | **Subtraction Prop. of Eq.** |
|  | **Division Prop. of Eq.** |

1. **What is the missing reason?** 
   1. Addition
   2. Subtraction
   3. Transitive Property
   4. Distributive Property

**Use the following graph for question 3.**

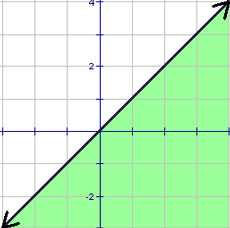
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1. **A system of linear equations has been graphed in the diagram. Determine a reasonable solution for the system of equations.** 
   1. (-2, 3)
   2. (2, 3)
   3. (2, -3)
   4. (-2, -3)

**Use the following system for question 4.**

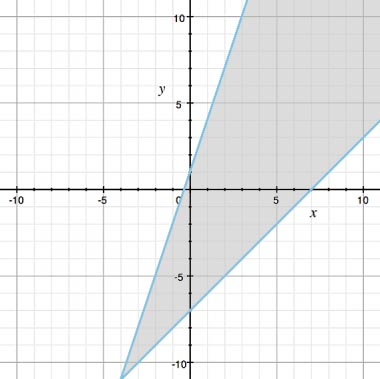
1. **When solving this system of equations by elimination, which could be the resulting equation when a variable has been eliminated?** 
   1. 13x = 18
   2. -7x = 2
   3. -7y = 62
   4. 8x - y = 14

**Use the following graph for question 5.**



1. **The graph shown is for the inequality y ≥ x. The graph has one thing wrong. What is it?** 
   1. The shading is on the wrong side of the boundary line.
   2. The boundary line should be dotted or dashed.
   3. The boundary line has the wrong y-intercept.
   4. The boundary line has the wrong slope.

**Use the following graph for question 6.**



1. **Which system of inequalities is shown in the graph?** 
   1. y > x – 7 and 3x – y > -1
   2. y ≥ x – 7 and 3x – y < -1
   3. y ≥ x – 7 and 3x – y ≥ -1
   4. y ≤ x – 7 and 3x – y ≤ -1

**Use the following graph for question 7.**

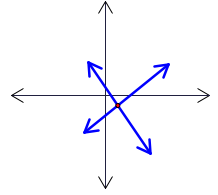


1. **Which of the sets of equations represents the two lines graphed?** 
   1. y = x + 2 and y = x – 4
   2. y = x + 2 and y = -x - 4
   3. y = -x + 2 and y = x – 4
   4. y = -x + 2 and y = -x - 4

**Use the following system for question 8.**

1. **Solve the system of equations.** 
   1. x = 0, y = 3
   2. x = 3, y = 0
   3. x = 1, y = -2
   4. x = -2, y = 1
2. **Solve: 5y - 10 = -25.**
   1. y = -3
   2. y = -7
   3. y = 3
   4. y = 7

**Use the following graph for question 10.**

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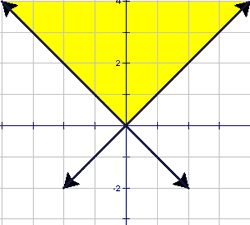
1. **A system of linear equations has been graphed in the diagram. Determine a reasonable solution for the system of equations.** 
   1. (2, -1)
   2. (-1, 2)
   3. (-2, 1)
   4. (0, -2)
2. **Match the following phrase to the correct mathematical expression:**

two less than the product of *y* and 8

**Use the following system for question 12.**

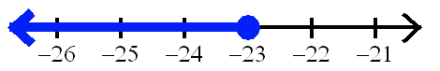
1. **Solve the system of equations using substitution.** 
   1. (-6,8)
   2. (-6,-4)
   3. (-2,-4)
   4. (-2,0)

**Use the following graph for question 13.**

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1. **Which system of inequalities is represented by the graph?**

**Use the following graph for question 14.**

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1. **Which inequality's solution is represented by the graph?** 
   1. -2x + 6 ≤ 52
   2. -2x + 6 ≥ 52
   3. 2x + 6 ≤ -52
   4. 2x - 6 ≥ -52
2. **Find the value of x when** 
   1. -6
   2. 2

**Use the following system for question 16.**

1. **Solve the system of equations.** 
   1. (-2,4)
   2. (4,-2)
   3. (-4,-2)
2. **Sarah is saving to buy a new phone. She needs $150, and she has already saved $63. Write an equation to model this situation. Let x represent the amount of money Sarah needs.** 
   1. x - 63 = 150
   2. x + 63 = 150
   3. x + 150 = 63
   4. x - 150 = 63
3. **Solve: 5 - 2x < 7.** 
   1. x < -1
   2. x > -1
   3. x < -12
   4. x > -12
4. **Solve:** 
   1. -14
   2. 10
   3. 12
   4. 42
5. **Match the following mathematical equation to the appropriate phrase:**
   1. four more than *x* divided by 5 is 20
   2. the sum of *x* and 4, divided by 5 is 20
   3. *x* added to the quotient of 4 and 5 is 20
   4. 5 divided by *x* plus 4 is 20