

Name \_\_\_\_\_

**Unit 3**

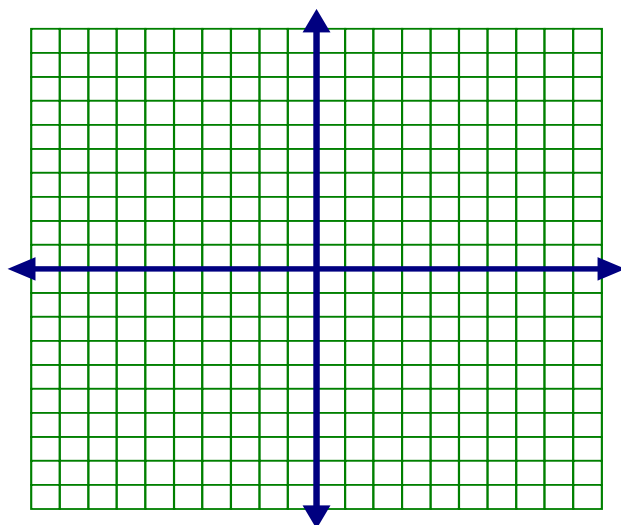
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**Lesson 7**

**DO NOW:** Solve the systems of equations graphically.

$$12y - 4x = 12$$

$$-3y + 4x = 6$$



**Aim: Solving systems of equations algebraically using the addition/elimination method.**

1. Solve the systems of equations algebraically.

$$12y - 4x = 12$$

$$-3y + 4x = 6$$

2. What is the solution of the system of equations below?

$$x + 2y = 7$$

$$-x + 3y = 18$$

3. Solve the systems of equations algebraically.

$$4x + 3y = 27$$

$$-2x + y = -1$$

4. What is the solution of the system of equations below?

$$-3y + 4x = 17$$

$$-5y + 3x = 21$$

### **PRACTICE PROBLEMS**

5. What is the solution of the system of equations below?

$$2x + 3y = 7$$

$$x + y = 3$$

- 1)  $(1, 2)$
- 2)  $(2, 1)$
- 3)  $(4, -1)$
- 4)  $(4, 1)$

6. What is the value of the  $y$ -coordinate of the solution to the system of equations  $2x + y = 8$  and  $x - 3y = -3$ ?

- 1)  $-2$
- 2)  $2$
- 3)  $3$
- 4)  $-3$

7. What is the value of  $A$  in the following system of equations?

$$2A + 3W = 12$$

$$6A - 5W = 8$$

- 1)  $1$
- 2)  $2$
- 3)  $3$
- 4)  $9$