Unit: Systems of Equations
Homework 7

Name _____

Date _____ Pd_____

SOLVING SYSTEMS BY ELIMINATION

Use your knowledge of solving systems by elimination to answer each of the questions below.

1. McKayla is using elimination to solve the system below and will first add the equations together.

$$5x - 2y = 42$$
$$-3x + 2y = -26$$

Which of the following shows the result of the two equations added together?

A. $8x = 16$
B. $2x = 16$
C. $2x = 68$
D. $8x = 68$

2. Beckett needs to solve the system of equations below using elimination.

$$-2x + 4y = -2$$
$$6x - y = 28$$

Which correctly describes the first step Beckett should take?

A. Multiply each term in the 1st equation by -3
B. Multiply each term in the 1st equation by 3
C. Multiply each term in the 2nd equation by -4
D. Both B and C would work

In 3-7, solve each system by elimination. Then, plot your solution on the graph. Connect the plotted points in order to solve the riddle.

3.

$$9x - 3y = -42$$
$$-9x + 8y = 22$$

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4.

$$2x + 4y = 14$$
$$3x - 4y = -39$$

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5.

$$-5x - y = 8$$
$$5x - 3y = -16$$

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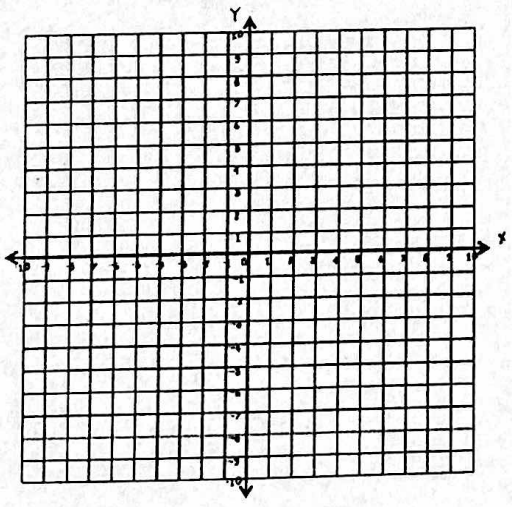

6.

$$8x + 2y = 20$$
$$-4x + y = 2$$

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7.

$$-3x - 2y = -1$$
$$4x + 6y = -12$$

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WHAT HAPPENS IN DECEMBER THAT WILL NEVER HAPPEN IN JANUARY?