

Name: _____
7/8A

Date: _____
Classwork 10.5

Which is Best? Substitution or Elimination

Warm-Up: Answer the following questions based on your previous knowledge of solving systems algebraically.

1. Can you solve the following systems of equations using elimination? Why or why not?

$$4x + 8y = 20$$

$$2y = 4x - 30$$

2. Do you think it is easier to use the substitution or elimination method for the following systems? Justify your answer.

a. $-2x + 3y = -6$

$$y = 8 - x$$

b. $3x + 2y = 8$

$$2x - 2y = 12$$

Directions: Solve each system of equations algebraically by using *either* substitution or elimination.

1. $y = 3x + 4$
 $y = -2x + 9$

2. $3x - 3y = 15$
 $x = 1 + 2y$

3. $4x - 3y = 22$
 $2x + 8y = 30$

4. $x + 3y = 18$
 $-x + 2y = 7$

5. $x - 2y = 4$
 $y = x - 2$

6. $3x - 4y = -27$
 $2x + y = -7$

7. $2x - y = 3$
 $x + y = 3$

8. $-2x + 3y = 9$
 $y = 2x + 7$

9. $4x + 8y = 20$
 $-2x + y = -15$