

Name Key

Date _____

Mrs. Roubos

8A Alg 1 CC

Do Now

Solve the following systems of equations and analyze the solutions

1. $y = 2x + 4$
 $y = 2x + 6$

$$\begin{array}{r} 2x + 4 = 2x + 6 \\ -2x \quad -2x \\ \hline \end{array}$$

$$4 \neq 6$$

NO solutions

2. $y = 2x + 3$
 $2y = 4x + 6$

$$2y = 4x + 6$$

$$2(2x + 3) = 4x + 6$$

$$4x + 6 = 4x + 6$$

$$\begin{array}{r} 4x + 6 = 4x + 6 \\ -4x \quad -4x \\ \hline \end{array}$$

$6 = 6$ Infinitely many

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

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

$$-3x + 3(3 + x) = 4$$

$$-3x + 9 + 3x = 4$$

$$9 \neq 4$$

NO solutions