

## Sec. 7.5 – Using an Elimination Strategy to Solve a System of Linear Equations

1. Solve this linear system by elimination.

$$2x + 7y = 24$$

$$3x - 2y = -4$$

2. Use an elimination strategy to solve this linear system.

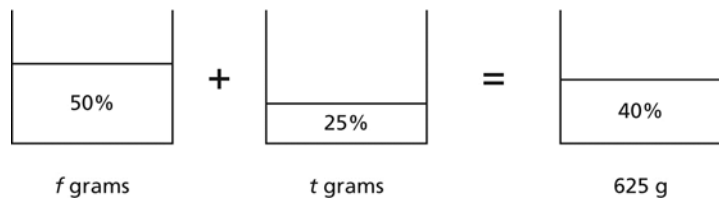
$$\frac{3}{4}x - y = 2$$

$$\frac{1}{8}x + \frac{1}{4}y = 2$$

**3. a)** Write a linear system to model this situation:

An artist was commissioned to make a 625-g statue of a raven with a 40% silver alloy.

She has a 50% silver alloy and a 25% silver alloy.



**b)** Solve this problem:

What is the mass of each alloy needed to produce the desired alloy?

4. Solve this linear system.

$$3x + 9y = 5$$

$$9x - 6y = -7$$