

Solve this system by elimination

$$\textcircled{1} \quad -3x + 3y = -9$$

$$\textcircled{2} \quad 6x + 2y = 2$$

$2(-3x + 3y = -9)$  ← multiply  $\textcircled{1}$  equation by 2 to get opposite coefficients

$$\textcircled{1} \quad -6x + 6y = -18$$

$$\textcircled{2} \quad +6x + 2y = 2$$

← stack equations and add like terms  
-6x & 6x will cancel

$$8y = -16$$

← Resulting equation from adding  $\textcircled{1}$  &  $\textcircled{2}$

$$y = -2$$

$$\textcircled{1} \quad -6x + 6(-2) = -18$$

← substitute -2 in for y in  $\textcircled{1}$  equation and multiply

$$-6x - 12 = -18$$

$$-6x = -6$$

← Add 12 to both sides

$$x = 1$$

← divide both sides by -6

$$(1, -2)$$

← solution