

Quiz solution:

1. Plug in $(1, 2)$ into $-2x + y \geq 5$

If false then we want shade the side of the line that contains $(1, 2)$.

$$\underbrace{-2(1) + 2}_{0} \stackrel{?}{\geq} 5$$

$$0 \geq 5 \leftarrow \text{false}$$

So we do indeed want to shade the side of the line $-2x + y = 5$ that contains $(1, 2)$

Ans: True

2. Plug in $x = -6$ $y = 5$ $z = 0$

check it satisfies all 3 eqns

$$\left\{ \begin{array}{l} -6 + 5 + 0 = -1 \checkmark \\ -12 + 15 + 0 = 3 \checkmark \\ -12 + 5 + 0 = -7 \checkmark \end{array} \right.$$

True