

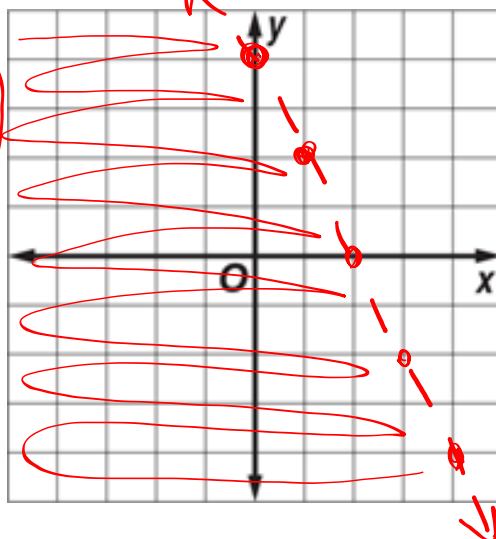
Warm Up

Graph the following linear inequality.

$$y < -2x + 4$$

$$-2 = \frac{-2}{1}$$

$$= \frac{2}{-1}$$



① Plot Points

② solid vs. dotted

③ shade

Systems of Inequalities

Clear Learning Target

You will be able to solve systems of linear inequalities by graphing.

Example #1: Solve.

SHADING

$> \geq$

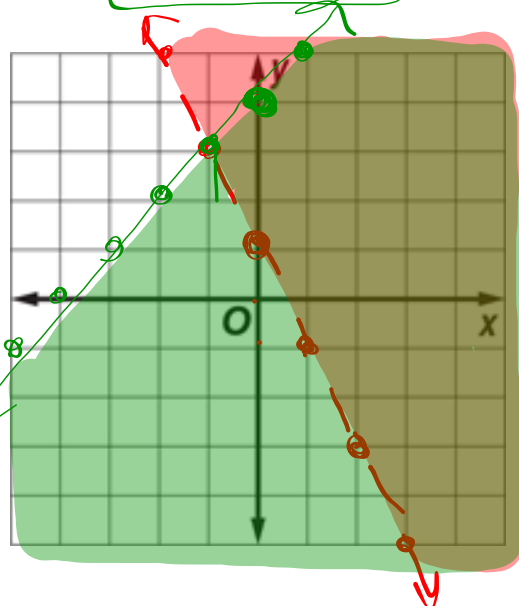
above

$< \leq$

below

$$y > -2x + 1$$

$$y \leq x + 4$$



LINES

$\geq \leq$

solid

.....

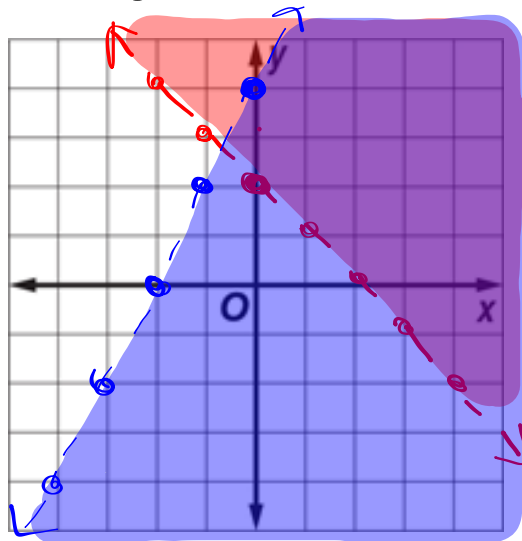
$> <$

dotted

You Try! Solve.

$$y > -x + 2$$

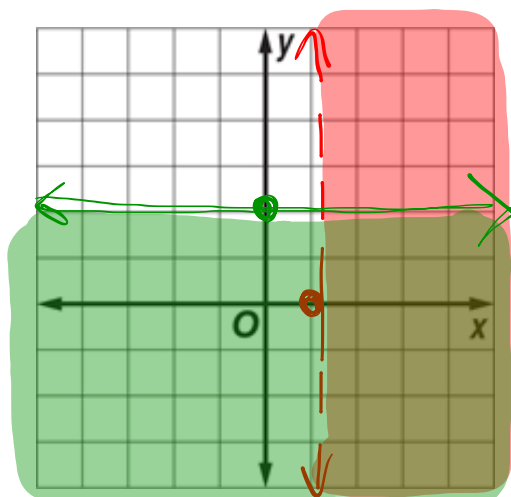
$$y < 2x + 4$$



Example #2: Solve.

vertical $\leftarrow x > 1$

horizontal $\leftarrow y \leq 2$



EXIT TICKET

1. Where do you find the **soluon** to a system of inequalies on a graph?
2. Would an inequality using this symbol $>$ use a **doed** or a **solid** line? How do you know?
3. Would an inequality using this symbol $>$ be shaded **above** or **below** the boundary? How do you know?