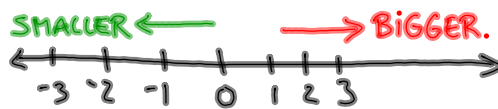
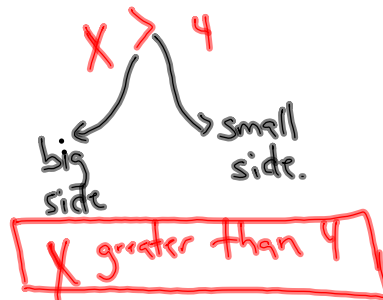
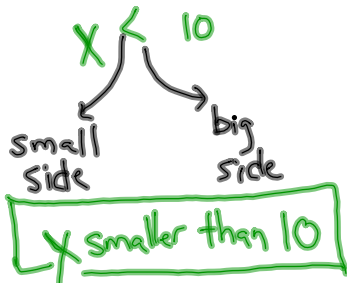


# INEQUALITIES

• COUPLE THINGS FIRST...



• READ FROM LEFT → RIGHT...



$y <$  (less than)

dots

shade below

$y \leq$  (less than or equal to)

solid

shade below

$y >$  (greater than)

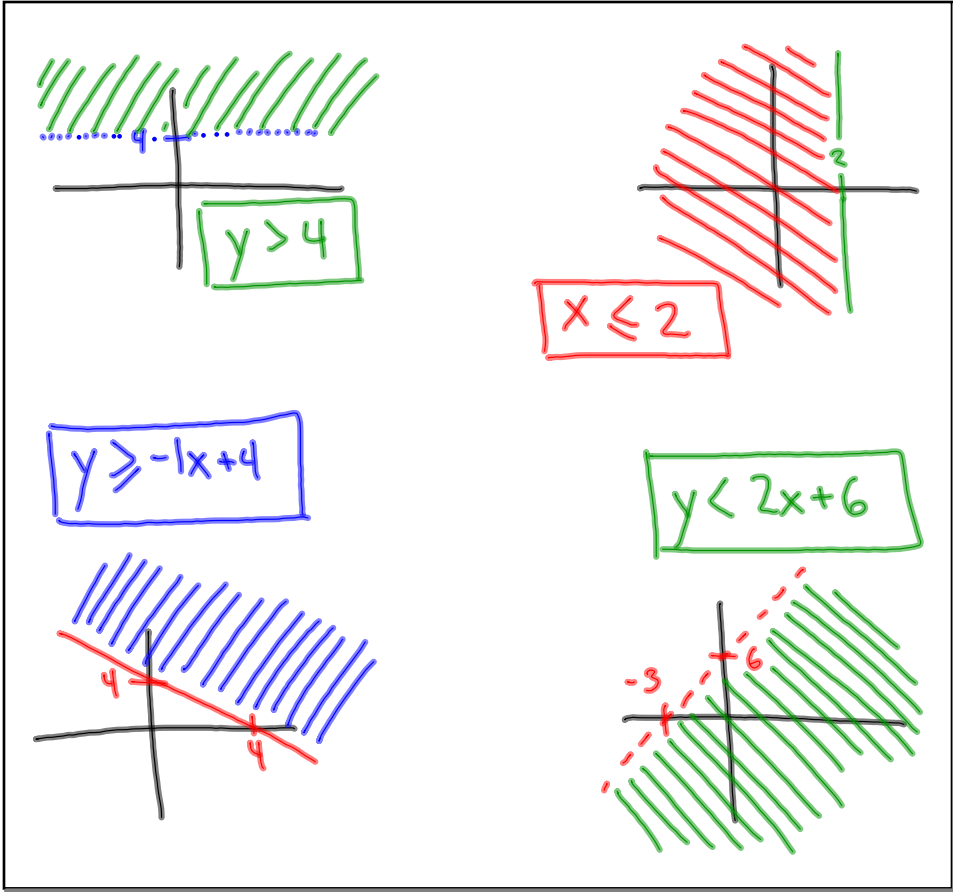
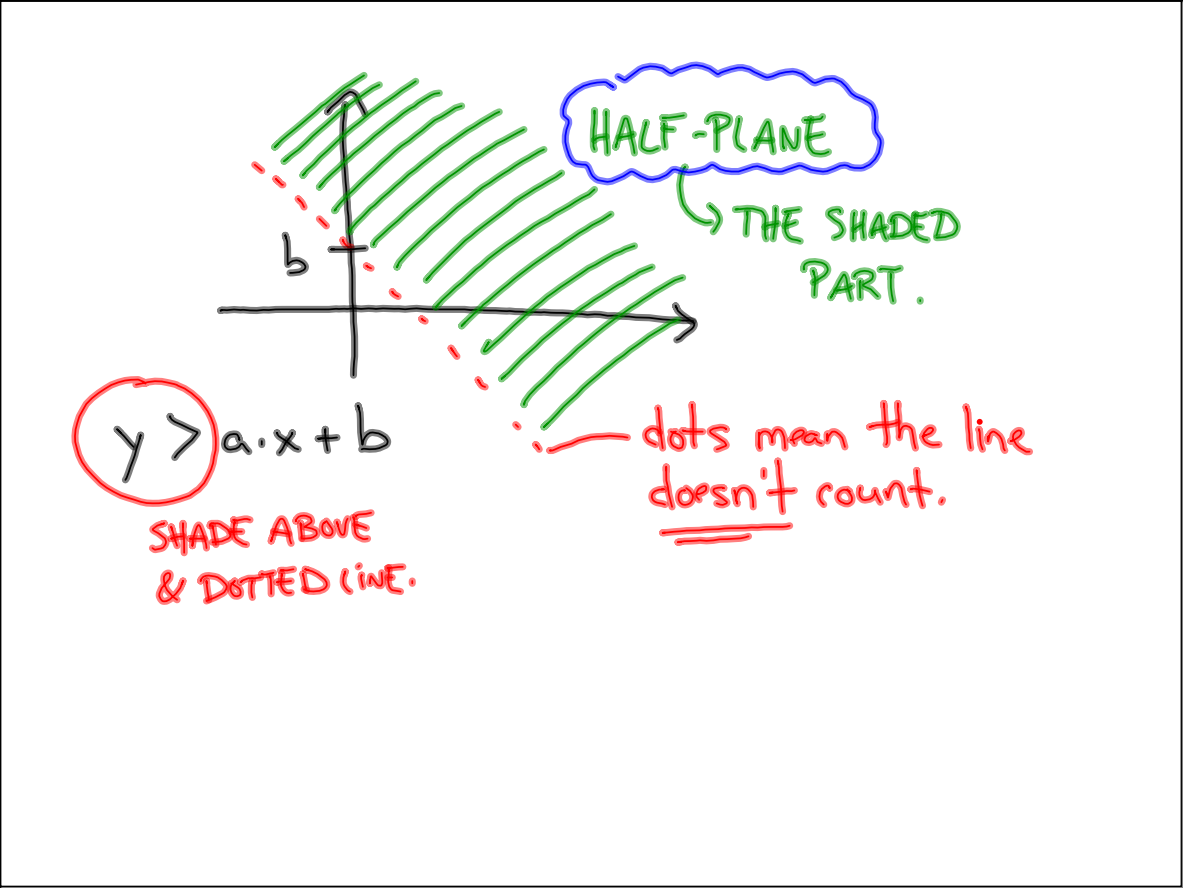
dots

shade above

$y \geq$  (greater than or equal to)

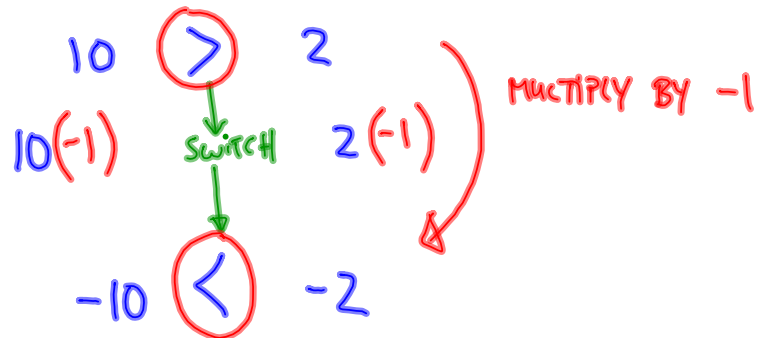
solid

shade above.



IF YOU MULTIPLY OR DIVIDE BY A NEGATIVE NUMBER, SWITCH THE SIGN.

REASON: BECAUSE 'BIGGER' NEGATIVE NUMBERS ARE ACTUALLY 'SMALLER' ON A NUMBER LINE.



ISOLATE y:  $-2y - 6 < 4x$

$$\begin{array}{r} -2y - 6 < 4x \\ +6 \qquad +6 \\ \hline \frac{-2y}{-2} < \frac{4x + 6}{-2} \end{array}$$

$$y > -2x - 3$$