

# Linear Inequalities

$<$  or  $>$

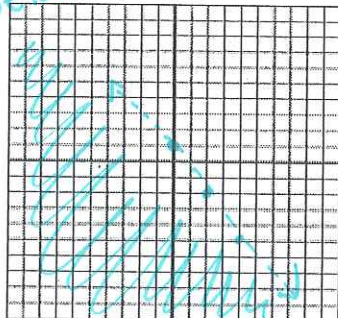
dotted lines

$\leftarrow \text{-----} \rightarrow$

$\circ$  = open circles

$$y = -\frac{3}{2}x + 1$$

shade below  $\rightarrow y < -\frac{3}{2}x + 1$



$$\frac{3y}{3} \geq \frac{-2x+12}{3} \quad \frac{2}{3}$$

shade above  $y \geq -\frac{2}{3}x + 4$

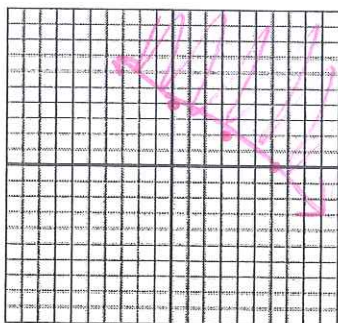
$\geq$  or  $\leq$

solid line

$\longleftrightarrow$

$\bullet$  closed circle

$$2x + 3y \geq 12$$



\* when divide or multiply by a negative, switch inequality sign \*