

# Graphing Inequalities

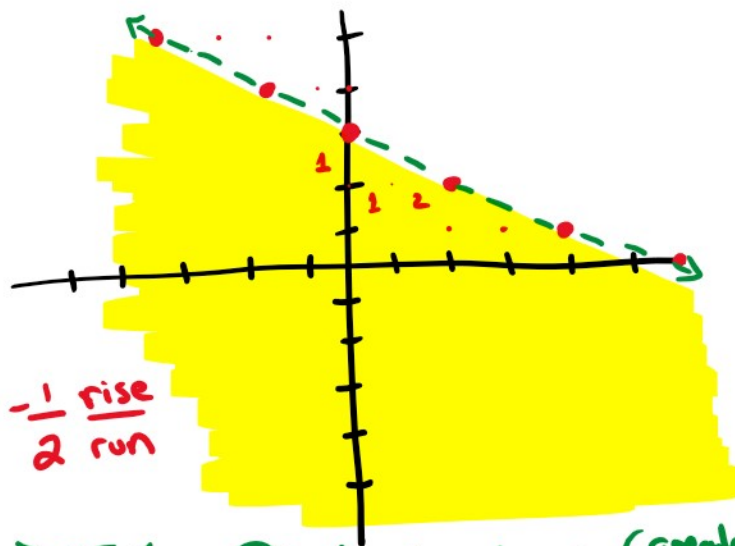
$$y < -\frac{1}{2}x + 3$$

↑ slope
↑ y-int

① Solve for y  
(y = mx + b form)

② Sketch the graph  
(plot y-int, use slope to plot more points)

$-\frac{1}{2}$  rise  
2 run



③ Dotted line (not equal to) > or <  
vs.  
Solid line (equal to) ≥ or ≤

④ shade above (greater than) ≥ or >  
or  
shade below (less than) ≤ or <