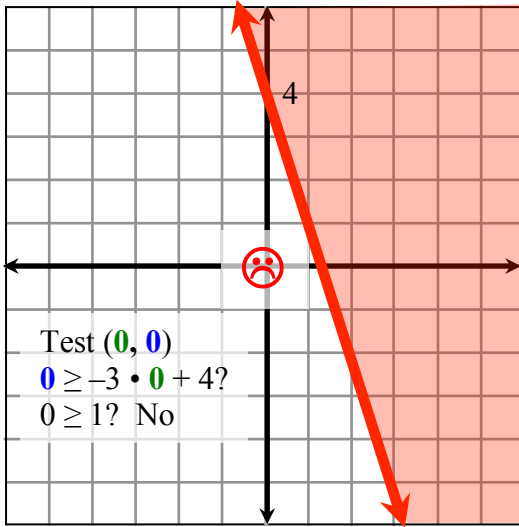


### 3.7 Linear Inequalities

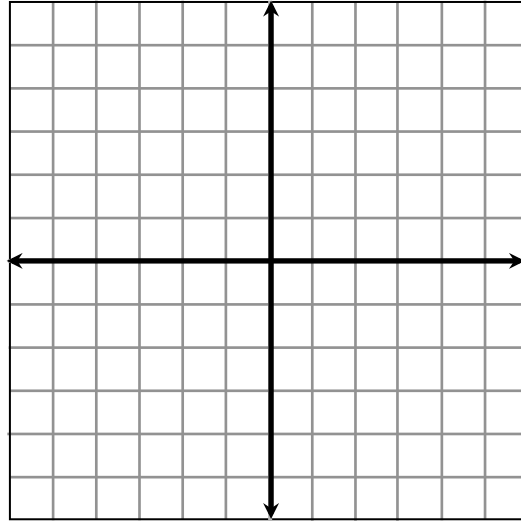
### Solutions

Sketch the solution set to each linear inequality.

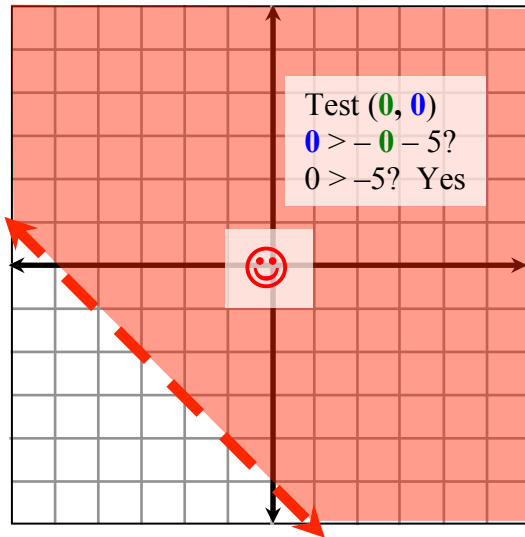
1.  $y \geq -3x + 4$



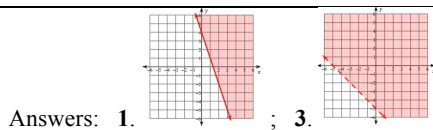
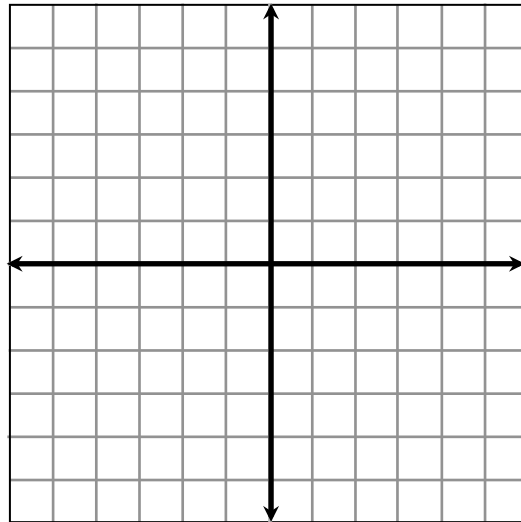
2.  $y \leq \frac{3}{5}x - 5$



3.  $y > -x - 5$



4.  $y > 2x - 5$

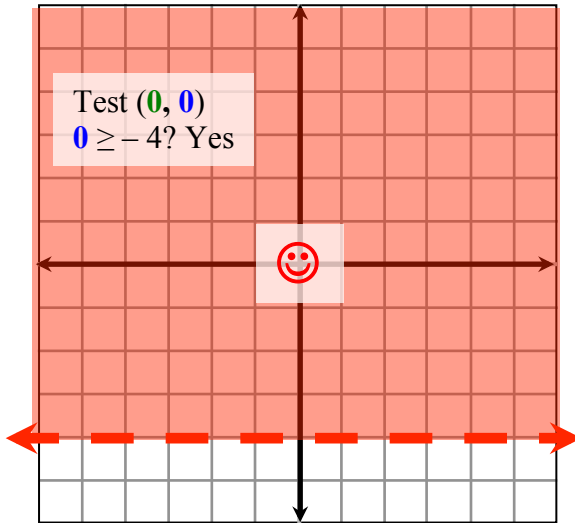


Answers: 1.

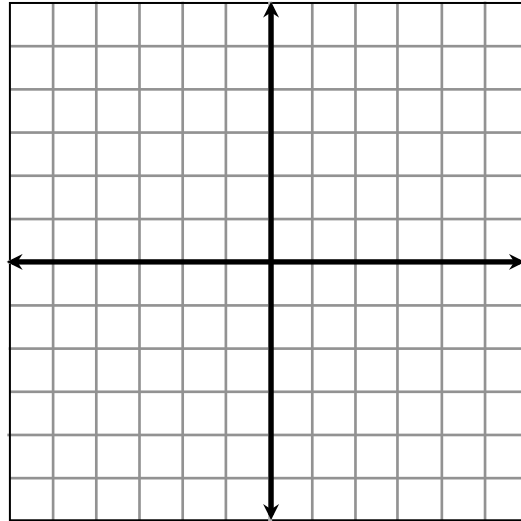
3.

Sketch the solution set to each linear inequality.

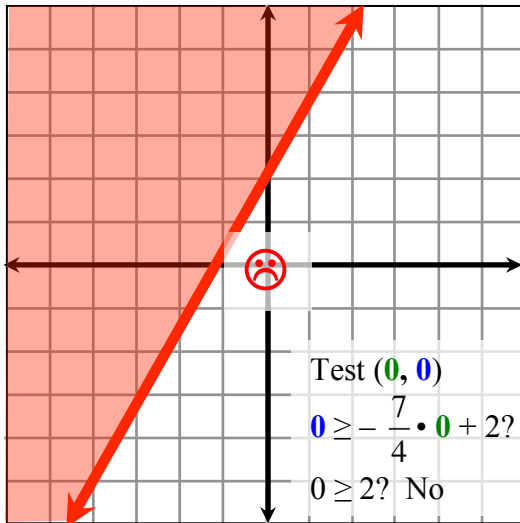
5.  $y > -4$



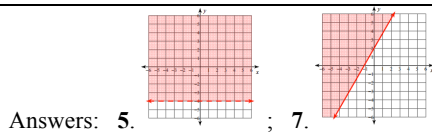
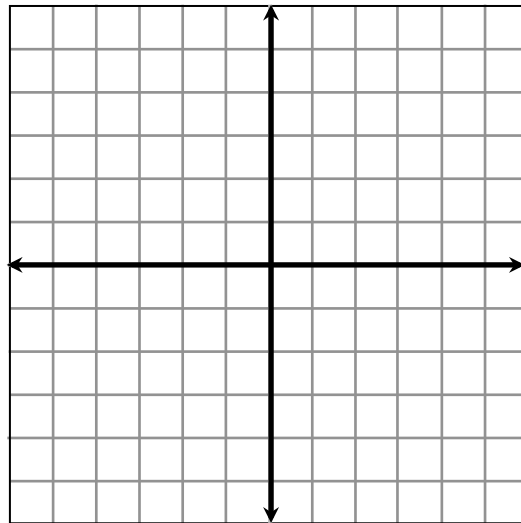
6.  $x < -5$



7.  $y \geq \frac{7}{4}x + 2$



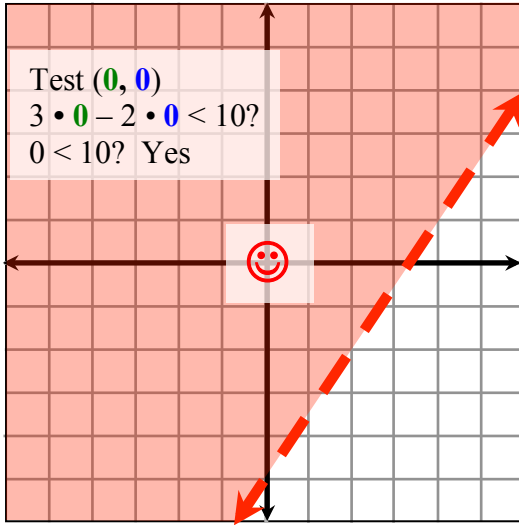
8.  $y \leq \frac{4}{3}x - 4$



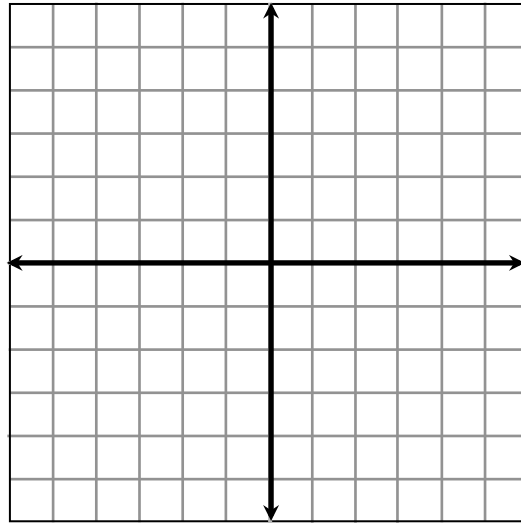
Sketch the solution set to each linear inequality.

9.  $3x - 2y < 10$

$$\begin{aligned} -3x & \quad -3x \\ -2y & < -3x + 10 \\ y & > \frac{3}{2}x - 5 \end{aligned}$$

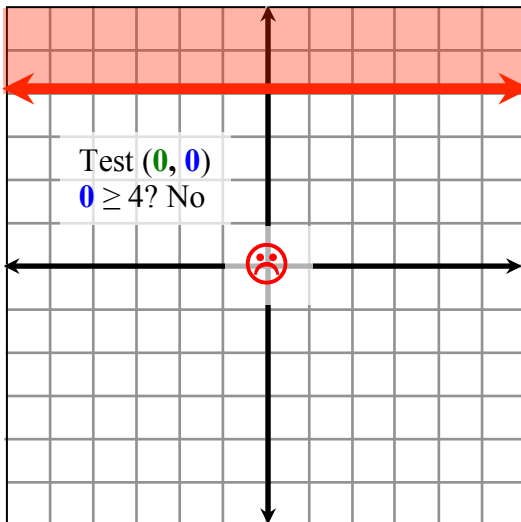


10.  $5x - 3y \leq -15$

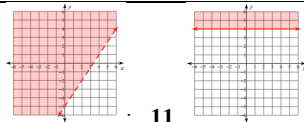
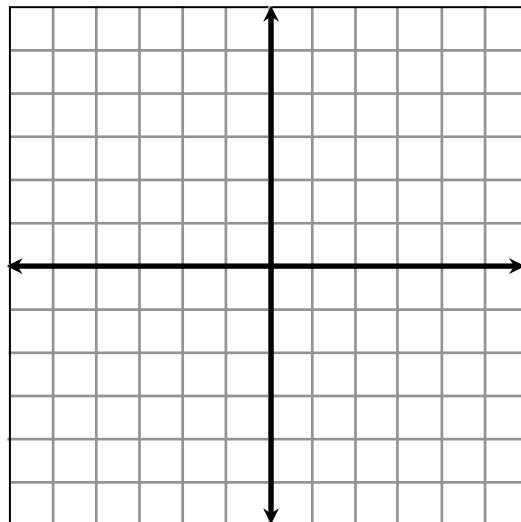


11.  $y - 4 \geq 0$

$$\begin{aligned} +4 & \quad +4 \\ y & \geq 4 \end{aligned}$$



12.  $x - y > 2$



Answers: 9.

11.