

Name: Key

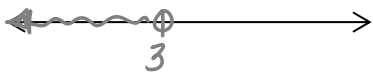
ARE YOU READY FOR THE QUIZ?
RAFFLE REVIEW!



Directions: Every time you see a star, come get your answers checked. If they are correct, you get a raffle ticket!

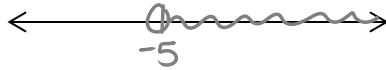
Graph the solution and state it using interval notation:

a) $x < 3$



Interval Not: $(-\infty, 3)$

b) $x > -5$



Interval Not: $(-5, +\infty)$

c) $x \leq -10$

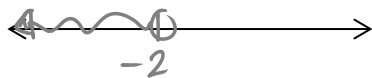


Interval Not: $(-\infty, -10]$

Solve, Graph, and state the solution using interval notation:

d) $-2x + 6 > 10$

$$\begin{array}{r} -6 \quad -6 \\ \hline -2x > 4 \\ \frac{-2}{-2} \quad \frac{-2}{-2} \\ x < -2 \end{array}$$



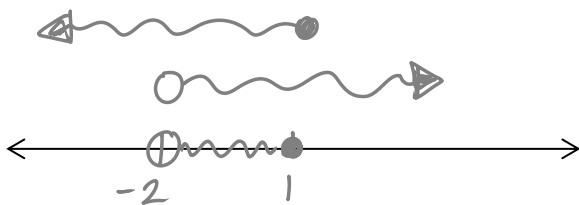
Inequality: $x < -2$

Interval Notation: $(-\infty, -2)$

Graph the compound inequalities, then determine the combined inequality:

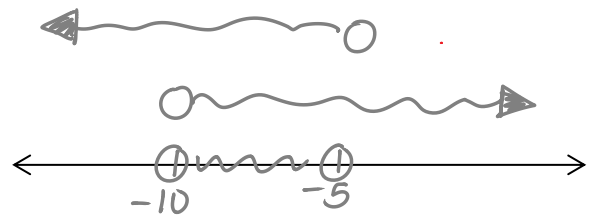
e) $-2 < x$ and $x \leq 1$

$x > -2$



Answer: $-2 < x \leq 1$

f) $x > -10$ and $x < -5$

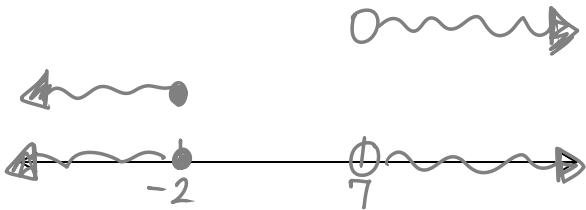


Answer: $-10 < x < -5$



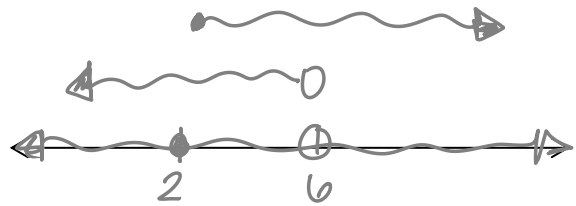
Name:

g) $x > 7$ or $x \leq -2$



Answer: $x \leq -2$ or $x > 7$

h) $x < 6$ or $x \geq 2$

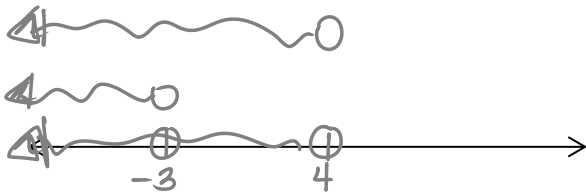


Answer: \mathbb{R}



i) $3x - 2 < -11$ or $2x + 8 < 16$

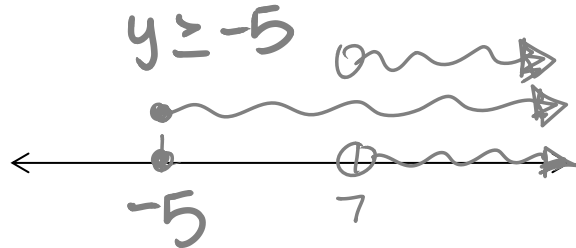
$$\begin{array}{r} +2 \quad +2 \\ \hline 3x < -9 \\ \frac{3x}{3} < \frac{-9}{3} \\ x < -3 \end{array} \quad \begin{array}{r} -8 \quad -8 \\ \hline 2x < 8 \\ \frac{2x}{2} < \frac{8}{2} \\ x < 4 \end{array}$$



Answer: $x < 4$

j) $-3y + 7 \leq 22$ and $y + 4 > 11$

$$\begin{array}{r} -7 \quad -7 \\ \hline -3y \leq 15 \\ \frac{-3y}{-3} \leq \frac{15}{-3} \\ y \geq -5 \end{array} \quad \begin{array}{r} -4 \quad -4 \\ \hline y > 7 \end{array}$$



Answer: $y > 7$

