

Section 2.6 Focus Exercises

1. Switch sides and change the direction of the inequality sign; **do not solve**.

a) $-3 < x$

b) $6 \geq y - 8$

c) $5 - 4m > 2m - 3$

2. Multiply each side by -1 and change the direction of the inequality sign; **do not solve**.

a) $-w < 9$

b) $-x \geq -3$

c) $12 \leq -4x$

d) $-15 > -3y$

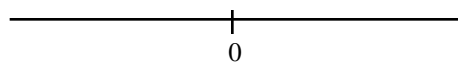
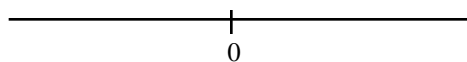
e) $-2p + 7 \leq -9$

f) $7 - k < -4k - 8$

3. Solve each of these inequalities. Be sure to write the solution with the *variable on the left* and draw its graph on the number line provided.

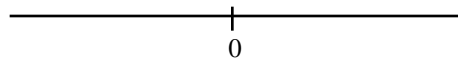
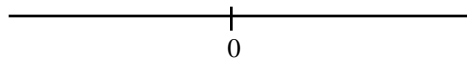
a) $y - 3 \geq 2$

b) $-x + 1 \leq -7$



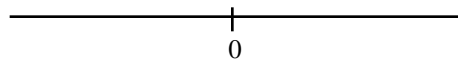
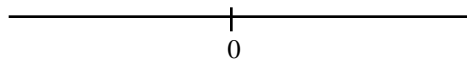
c) $-3m > -6$

d) $-10 < c - 6$



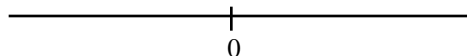
e) $10 > -5p$

f) $-6 \leq 2 - x$

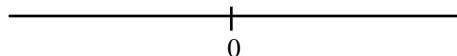


4. Solve each of these inequalities. Be sure to write the solution with the *variable on the left* and draw its graph on the number line provided.

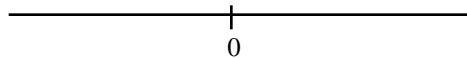
a) $4x < 3x - 6$



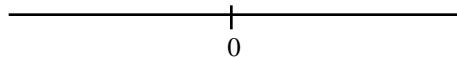
b) $x - 6 \leq 2x + 5$



c) $-2(y - 3) \geq 1 + 3y$



d) $11 - 4x > 3(x - 1)$



e) $\frac{3}{4}x + \frac{4}{3} \leq 1 + \frac{5}{6}x$

