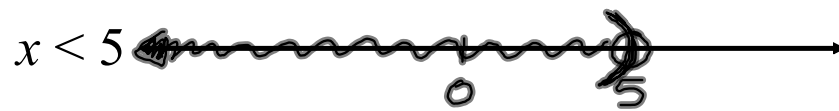


Algebra II

2-1

Solving Linear Inequalities

Graph the following:



interval notation: $(-\infty, 5)$



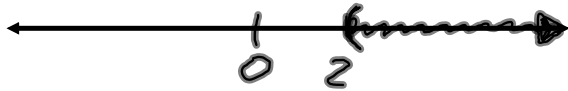
interval notation: $[-2, \infty)$

Solve. (pg 62)

$$1) x - 7 > -5$$

$$x - 7 + 7 > -5 + 7$$

$$x > 2$$



If you mult. or div by a negative, switch the inequality

$$5) \frac{-5x}{-5} < \frac{10}{-5}$$
$$x > -2$$



$$17) 5(x - 7) + 2(1 - x) > 3(x - 11)$$

$$5x - 35 + 2 - 2x > 3x - 33$$

$$3x - 33 > 3x - 33$$

\emptyset

Tell whether each statement is true for all real numbers. If you think it is not, give a numerical example to support your answer.

25) If $a < b$, then $a - c < b - c$

True

$$0 < 1$$

$$0 - 1 < 1 - 1$$

$$0 - (-1) < 1 - (-1)$$

$$-1 < 1$$

$$-1 - (-1) < 1 - (-1)$$

pg 62

oral 11-16 all

written

2-32 even