

Name _____



SOLVING INEQUALITIES

What value of x represents the solution of $-2(x - 1) + 5x = 2(2x - 1)$?

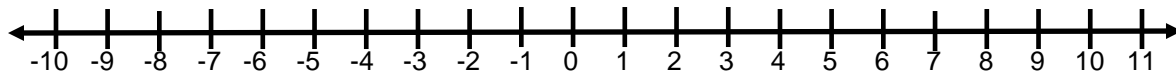
An _____ is a statement that two quantities are not equal.

These quantities are compared by using one of the following symbols:

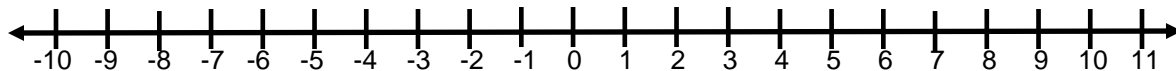
$<$	\leq	$>$	\geq
$A < B$ A is less than B	$A \leq B$ A is less than or equal to B	$A > B$ A is greater than B	$A \geq B$ A is greater than or equal to B
○	●	○	●

EXAMPLES: Graph each of the following inequalities.

1. $b < -3$

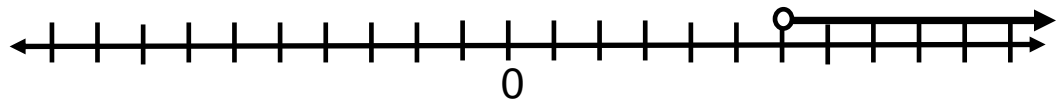


2. $z \geq 5$

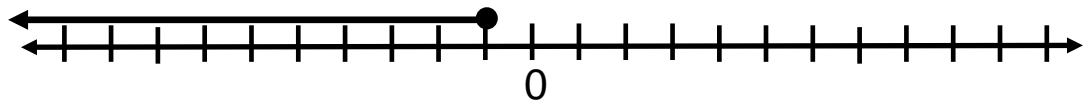


EXAMPLES: Write the inequality illustrated by each graph.

3. _____



4. _____



RULE:

If you multiply or divide both sides of an inequality by a negative number, FLIP the inequality sign.

EXAMPLES: Solve each inequality and graph the solution.

5. $160 + 4f \leq 500$



6. $7 < 21 + 2t$



7. $-5(x + 2) - 3x < 18$



8. $4 \geq x - 3(x + 2)$

