6 - 1
Solving Inequalities by Addition and Subtraction

For all numbers a, b, and c...

1.)

2.)

Ex: $x - 45 \leq 13$

$+45 \qquad +45$

$$\boxed{x \leq 58}$$

Ex: $19 + y \geq 16$

$-19 \qquad -19$

$$\boxed{y \geq -3}$$

Ex: $5p + 7 > 6p$

$-5p \qquad -5p$

$7 > p$

$$\boxed{p < 7}$$

Ex: Write an inequality for the sentence, then solve.
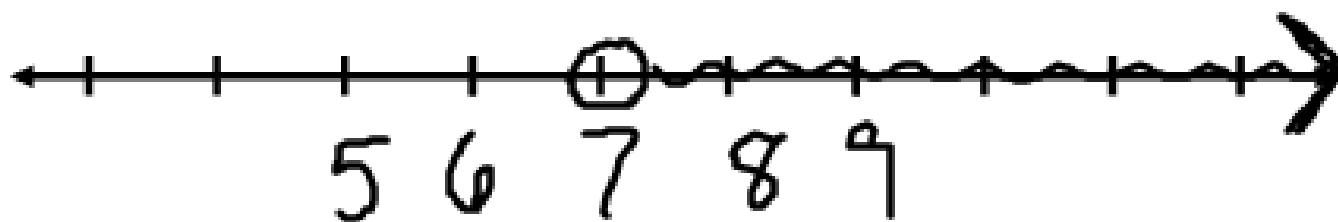
"Four times a number is no more than three times that number plus eight."

Graphing Inequalities
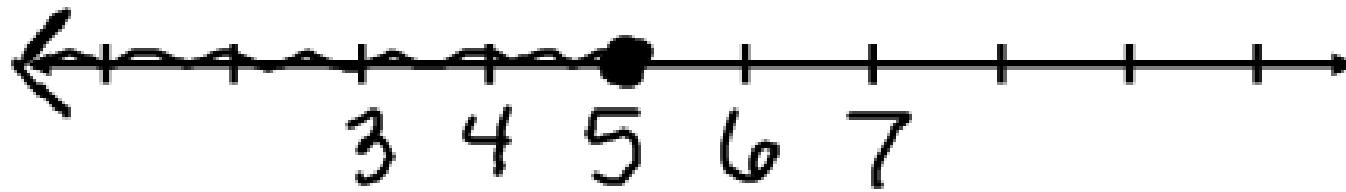
◯ means $<$ $>$

● means $\leq$ $\geq$

Ex: x > 7

Ex: ~~scribbled out~~

$$5 \geq y$$

$$y \leq 5$$

Ex: x < 2

Ex: x ≥ - 1

Ex: x > 12

Ex: x ≤ 0

Ex: Solve and graph:

$$-12n - 4 \leq -11n$$

Homework:

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