Alg1

February 6, 2012

Get out Salmon WS1 from Friday

19) $16 \geq n + (+10)$

$-10 \qquad -10$

$6 \geq n$

5) $11 \cdot -14 \leq \frac{n}{11} \cdot 11$

$-154 \leq n$

28) $3 \cdot -4 < \frac{x}{3} \cdot 3$

$-12 < x$

21) $\frac{5r}{5} < \frac{-30}{5}$

$r < -6$

2/6 - Solving Two-Step Inequalities

Remember:

When there are 2 operations,
*do the one **connected** to the variable **last**.*

from before...

Connected to x

Do this one first

$$\frac{x}{3} - 4 = 9$$

New - with inequalities...

$$-7 + \frac{r}{5} \leq -4$$

$$+7 \qquad +7$$

$$5 \cdot \frac{r}{5} \leq 3 \cdot 5$$

$$r \leq 15$$

Try these. Remember to switch the inequality when necessary!

$$6n + 8 \le -76$$
$$-8 \quad -8$$
$$\frac{6n}{6} \le \frac{-84}{6}$$
$$n \le -14$$

$$6\overline{)84}$$
$$-6$$
$$24$$
$$-24$$
$$0$$

$$-4 < 5 + 9m$$
$$-5 \quad -5$$
$$\frac{-9}{9} < \frac{9m}{9}$$
$$-1 < m$$
$$m > -1$$

Move Variable to the left every time now.

$$-4 < 10 - 7n$$
$$-10 \quad -10$$
$$\frac{-14}{-7} < \frac{-7n}{-7}$$
$$2 > n$$
$$n < 2$$

$$-8 + \frac{x}{3} < -12$$

$+8 \qquad +8$

$3 \cdot \frac{x}{3} < -4 \cdot 3$

$x < -12$

$$-5 \le \frac{x}{2} - 1$$

$-1 \qquad -1$

$-4 \le \frac{x}{2}$

$-8 \le x$

$x \ge -8$

$$-3 \le -1 + \frac{m}{3}$$

$+1 \qquad +1$

$-2 \le \frac{m}{3} \cdot 3$

$-6 \le m$

$m \ge -6$

HOMEWORK

Gold Inequalities WS2

Due Wednesday