

Name: _____

U4L3: MULTI-STEP INEQUALITIES

Inequalities can be solved the same way as we solve for variables in expressions and equations.

- Isolate the variable (get the letter on one side by itself)

If the variable is already on one side alone, this is simple!

$x < 5 + 6$ $x < 11$ x is less than 11 $\checkmark 10, 2$ $\times 14$	$y < 11 - 4$ $y < 7$ y is less than 7 $\checkmark 5, 3$ $\times 100$	$a > \frac{24}{2}$ $a > 12$ a is more than 12 $\checkmark 24$ $\times 11$
$10 \times 12 \leq b$ $120 \leq b$ 120 is less than or equal to b b is more than or equal to 120 $\checkmark 120, 121$ $\times 5$	$90 - 7 \geq f$ $83 \geq f$ 83 is greater or equal to f $\checkmark 83, 62$ $\times 84$	$(1 + 2 + 3) \times 5 \leq m$ $30 \leq m$ m is more than or equal to 30 $\checkmark 30, 32$ $\times 27$

If the variable isn't on one side alone, we must rearrange the inequality.

Reminder...to do this...

* Do the opposite operation

* Do the same to both sides

$\frac{10a}{10} \leq \frac{300}{10}$ $a \leq 30$ a is less than or equal to 30	$5 \times \frac{e}{5} < 8 \times 5$ $e < 40$ e is smaller than 40	$\frac{n+7}{-7} > \frac{33}{-7}$ $n > 26$ n is larger than 26
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