Notes

Algebra Section 6.3

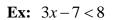
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Goal: "You will solve multi-step inequalities."



Date:_____

To Solve Multi-Step Inequalities:



Solve:

Ex:
$$2x - 5 \le 23$$

Ex:
$$-0.6(x-5) \le 15$$



Ex: 6x - 7 > 2x + 17

Ex:
$$6y + 5 \ge 11$$

Ex:
$$-\frac{1}{4}(p-12) > -2$$

Solve each equation:

Ex:
$$4(2x + 3) = 2(4x + 5)$$

Ex:
$$3(4x + 6) = 2(6x + 9)$$

The same principle applies with inequalities:

This means that: If you get a ______, then _____ is the solution.

If you get a _____, then there is _____.

Solve:

Ex:
$$14x + 5 < 7(2x - 3)$$

Ex:
$$12x-1 > 6(2x-1)$$

Ex:
$$5x-12 \le 3x-4$$

Ex:
$$5(m+5) < 5m+17$$

Ex:
$$1-8s \le -4(2s-1)$$

Ex:
$$-7x + 2 < -5$$

Ex: A gas station charges \$0.10 less per gallon if a customer purchases a car wash. What are the possible amounts of gallons of gasoline you can buy if you want to spend at most \$20 and you get a car wash?



Ex: You are saving money for a summer camp that costs \$1800. You have \$500 saved so far and 14 more weeks to save. What are the possible average amounts you need to save per week to have the total needed for camp?