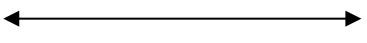
PRACTICE QUIZ: Inequalities

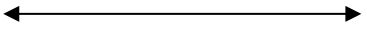
Name:_____

7th Grade Math

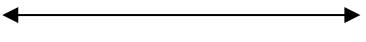
For 1 – 5, solve, check, and graph each inequality. SHOW YOUR WORK!

1) $-2 \leq -5 + d$ **CHECK:** **GRAPH:** 

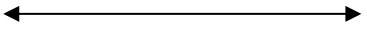
#1 answer: _____

2) $16 > -3.2h$ **CHECK:** **GRAPH:** 

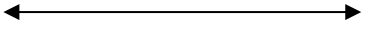
#2 answer: _____

3) $-\frac{4}{9} \leq \frac{2}{3}c$ **CHECK:** **GRAPH:** 

#3 answer: _____

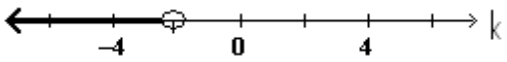
4) $-4(h + 2) < -28$ **CHECK:** **GRAPH:** 

#4 answer: _____

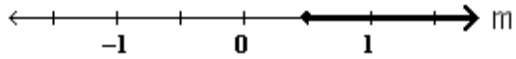
5) $-12(4 - m) \geq 8(4m - 14)$ **CHECK:** **GRAPH:** 

#5 answer: _____

For 6 & 7, create an inequality that represents each graph.

6) 

6) _____

7) 

7) _____

For 8 – 10, write an inequality and then solve for each situation.

8) Mr. Roy has $2,000 saved for a vacation. His airplane ticket is $637. Distinguish how much money he can spend for everything else while on vacation.

#8 inequality: _____

#8 answer: _____

9) Karly's Kar Wash charges $4.50 per car at their car wash. Distinguish how many cars they have to wash to earn at least $300.

#9 inequality: _____

#9 answer: _____

For 11 – 13, solve for the given variable.

10) $s = \frac{d}{t}$ **for d**

11) $3x + 7y = 2$ **for y**

#10 answer: _____

#11 answer: _____

12) The equation Pressure = Force ÷ Area $(P = \frac{F}{A})$ **shows us that pressure and area are inversely related. Solve the equation** $P = \frac{F}{A}$ **for "F." Then evaluate the force needed to create a pressure of 200 Pa over an area of 0.5 m^2.**

#12 equation: _____

#12 answer: _____