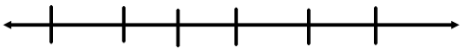
7.2 Solve Inequalities Using Add/Sub/Mult/Div

NOTES

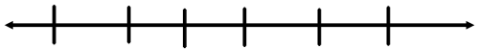
Write your questions here!

Solve and graph the solution, then check your answer.

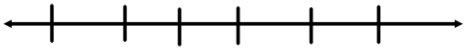
ex #1) $8 \leq x - 2.5$



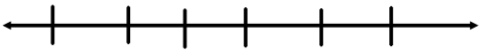
ex #2) $g + 4.2 < 5.6$



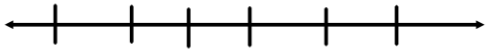
ex #3) $4h > -16$



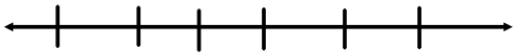
ex #4) $2 \geq \frac{r}{5}$



ex #5) $-7h > 42$



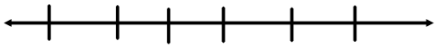
ex #6) $3 \geq -\frac{r}{15}$



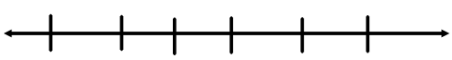
RULE:

Write the verbal sentence as an inequality. Then solve and graph.

ex #7) The quotient of y and -3 is greater than or equal to 12.

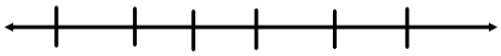


ex #8) The difference of b and 12 is less than -5.

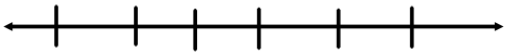


Try these!

1) -12 > -6h



2) -12 + h ≤ 8



SUMMARY:

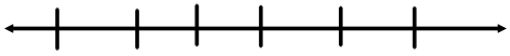
Now, summarize your notes here!

7.2 Solve Inequalities Using Add/Sub/Mult/Div

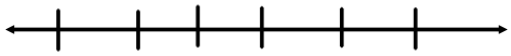
PRACTICE

Directions: Solve the inequality. Graph the solution.

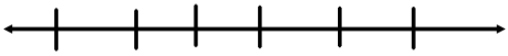
1) $-8 \leq 8 + y$



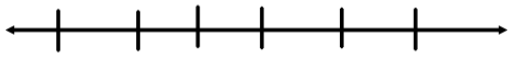
2) $n + 17 \leq 16\frac{4}{5}$



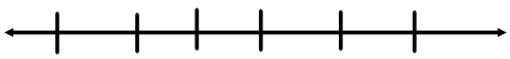
3) w + 14.9 > -2.7



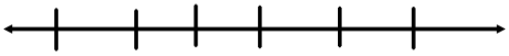
4) $1 \leq s - 8$



5) $q - 1\frac{1}{3} > -2\frac{1}{2}$



6) d – 1.92 > -8.76

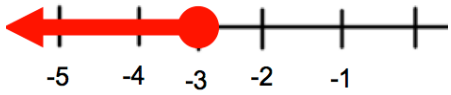


Directions: Describe and correct the error in solving the inequality or in graphing the solution.

7) $-17 \leq x - 14$

$-17 + 14 \leq x - 14 + 14$

$-3 \leq x$

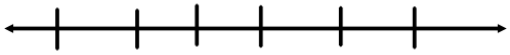


Directions: Write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

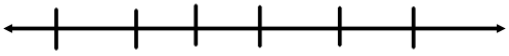
8) The difference of n and 15 is less than or equal to 37.

Directions: Solve the inequality. Graph your solution.

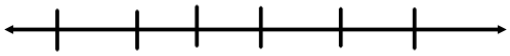
9) $-2p \geq 14$



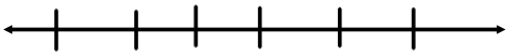
10) $\frac{q}{4} < 7$



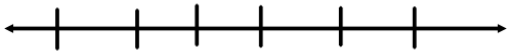
11) $-90 \geq 4t$



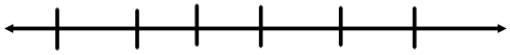
12) -8.4f > 2.1



13) $-1.5 \geq 6z$



14) $\frac{r}{-30} < 1.8$



Directions: Describe and correct the error in solving the inequality.

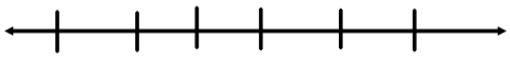
15) $\frac{x}{9} \leq -7$

$9 \cdot \frac{x}{9} \leq -7 \cdot 9$

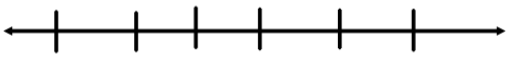
$x \geq -63$

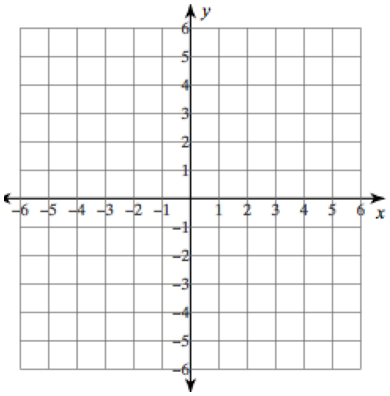
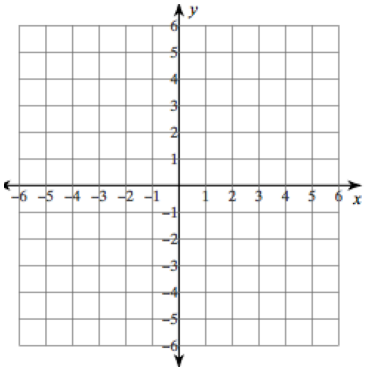
Directions: Write the verbal sentence as an inequality. Then solve the inequality and graph your solution.

16) The product of -15 and y is less than or equal to 90.



17) The quotient of w and 24 is greater than or equal to $-\frac{1}{6}$



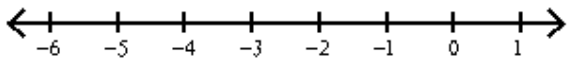
Skillz Review		
Graph the line.	Evaluate.	Solve.
1) y = -3 	2) $b^3 - a^2, when\ a = 4\ and\ b = 3$	3) $95 = 5(7 + 3b)$
4) $y = -2x + 1$ 	5) $-g^2 + 2g, when\ g = -6$	6) $-15 + 3x = 7x - x$

7.2 Solve Inequalities Using Add/Sub/Mult/Div

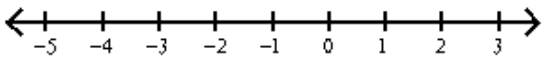
APPLICATION

Directions: Solve and graph each inequality.

1) $40 \leq -10b$

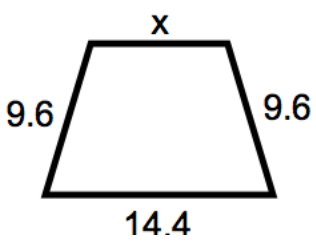


2) $x + 13.1 \geq 10.9$

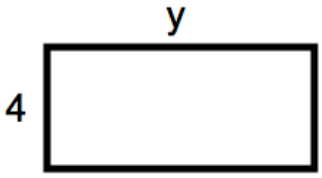


Write and solve an inequality to find the possible values of x.

3) Perimeter ≤ 44.5 feet.



4) Area < 64 meters squared.



5) Mr. Brust's touchdowns increased by 10 are greater than the 25 touchdowns Mr. Kelly has. Write an inequality and solve for all possible number of Mr. Brust's touchdowns.

6) Mr. Kelly is UNSTOPPABLE! He throws three touchdowns every game. How many games until he throws at least 60 touchdowns? Write an inequality and solve for all possible number of games.