

MasterMath

Solving Inequalities with Multiplication and Division

Name _____

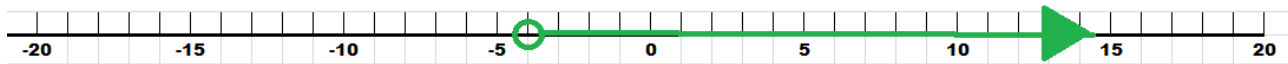
Date _____

1. Solve these Inequalities

Inequality	Solution
$3x > 9$	$x > 3$
$x \div 3 < 2$	$x < 6$
$2x - 6 \geq 24$	$x \geq 15$
$5 - 2x > 11$	$x < -3$
$3x - 9 > 18$	$x > 9$
$2x - 4x > 11$	$x < -5.5$
$3x + 2 < 8$	$x < 2$
$-8x > 24$	$x < -3$

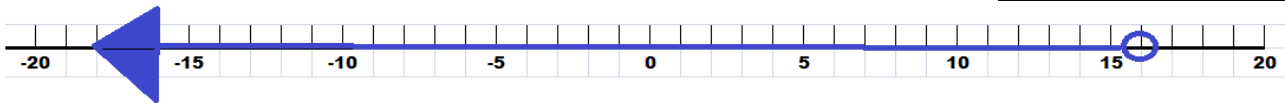
2. Solve this inequality, and then graph your solution: $6x > -24$

$x > -4$



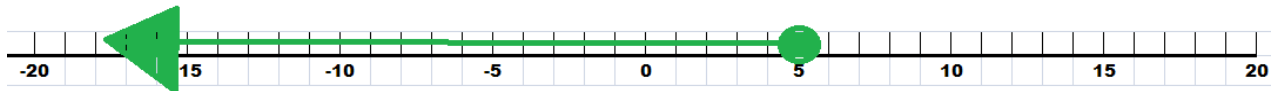
3. Solve this inequality, and then graph your solution: $4 - x > -12$

$x < 16$



4. The length of a rectangle is 12", and the area of the rectangle is no more than 60 Sq. In. Write and solve an Inequality to represent the width of the rectangle. Graph your solution.

Inequality	Solution
$12w \leq 60$	$w \leq 5$



5. Write an Inequality to describe this sentence, and then solve the Inequality: 6 times a number is less than 48.

Inequality	Solution
$6n < 48$	$n < 8$

6. Write an Inequality to describe this sentence, and then solve the Inequality: 125 is no less than 5 times a number z

Inequality	Solution
$125 \geq 5z$	$25 \geq z$

7. $x > z$ and $a > b$. Is it true that $a + x > b + z$?

yes
