

Solving Inequalities

ALGEBRA

Name: _____

Period: _____ #: _____

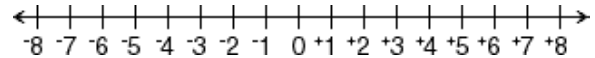
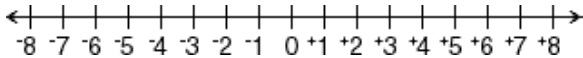
RULE

If you **MULTIPLY** or **DIVIDE** **BOTH SIDES** of an inequality by a **NEGATIVE** number, you must **REVERSE THE DIRECTION OF THE INEQUALITY!!!!!!**

Solve each inequality and graph on the number line. Show all work!

1. $m + 5 < 10$

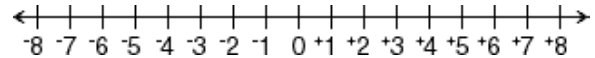
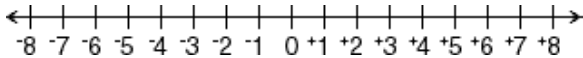
2. $3m \leq 9$



3. $x - 3 \geq 0.5$

4. $-2x < 4$

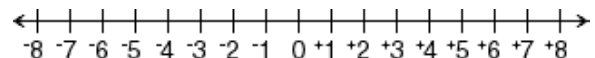
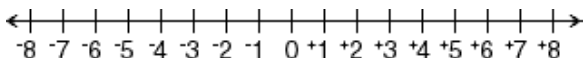
www.TUTOR-USA.com



www.TUTOR-USA.com

5. $2 < b + 5$

6. $\frac{x}{2} \leq 3$



www.TUTOR-USA.com

www.TUTOR-USA.com

Solve each inequality. Show all work.

7. $x - 10 \leq -7$

8. $10 < \frac{x}{-3}$

www.TUTOR-USA.com

9. $3m \leq 9$

10. $b + 5 > -6$

www.TUTOR-USA.com

11. $\frac{x}{-5} \geq 8$

12. $\frac{x}{7} \geq -3$

13. $c - 3 < 22$

14. $-8m \geq -40$

www.TUTOR-USA.com

www.TUTOR-USA.com

www.TUTOR-USA.com