

Worksheet 1.7
Absolute Value Equations/Inequalities
Practice Problems

Name _____

Decide whether the number is a solution of the equation or inequality.

1. $|5x - 4| = 6$; 2

2. $|3x + 4| = 8$; -4

3. $|5x - 4| > 6$; -3

Solution? yes or no

Solution? yes or no

Solution? yes or no

Rewrite the absolute value equation as two linear equations.

4. $|x + 2| = 7$

5. $|3x - 4| = 8$

6. $|1 - 4t| = 9$

Solve the equation.

5. $|x + 3| = 5$

6. $|2x + 6| = 14$

7. $|11 - 3x| = 2$

8. $|x + 2| = 7$

9. $|4 - 5x| = 6$

10. $|2x - 7| = 7$

Solve the inequality.

11. $|3x - 2| \leq 7$

12. $|2x - 1| > 5$

13. $|11 - 3x| < -4$