

Absolute Value Equations

Name _____

© 2015 Kuta Software LLC. All rights reserved.

Solve each equation. Leave answers as simplified fractions if necessary.

1) $|b| = 2$

2) $|a| = 3$

3) $|b| = 8$

4) $|n| = 9$

5) $|n| + 4 = 13$

6) $1 + |x| = 7$

7) $\frac{|x|}{5} = 4$

8) $\frac{|n|}{6} = 2$

9) $|x + 6| = 4$

10) $|x + 2| = 7$

11) $|8 + n| = 9$

12) $|x + 2| = 6$

13) $\frac{|9b|}{10} = 4$

14) $\left|\frac{v}{2}\right| + 7 = 12$

15) $-8|a - 4| = -88$

16) $3 + \left|\frac{x}{9}\right| = 4$

$$17) \quad |-3n + 9| + 7 = 19$$

$$18) \quad |9 + 4v| - 4 = 9$$

$$19) \quad |-1 + 6x| + 3 = 16$$

$$20) \quad |6 + 5x| - 3 = 53$$

$$21) \quad 4 + 10|a - 10| = 94$$

$$22) \quad 4|-7b + 7| + 2 = 30$$

$$23) \quad 10|-4 - 3b| - 5 = 95$$

$$24) \quad 2 + 3|9x + 8| = 32$$

$$25) \quad 7|2 - 10v| - 5 = 51$$

$$26) \quad 9|5p - 8| - 3 = 105$$