

## Absolute Value Equations

Date \_\_\_\_\_ Period \_\_\_\_\_

**CLASS EXAMPLES: Solve each equation.**

1)  $|n| = 10$

2)  $|m| = -2$

3)  $-3 + |k| = 2$

4)  $\frac{|n|}{8} = 3$

**Solve each equation.**

5)  $|x| + 3 = 13$

6)  $\frac{|r|}{6} = 4$

7)  $-9 + |n| = -16$

8)  $|n| + 8 = 13$

**CLASS EXAMPLES: Solve each equation.**

9)  $|x + 5| = 2$

10)  $\left|\frac{n}{7}\right| = 4$

**Solve each equation.**

11)  $|x + 6| = 16$

12)  $|7 + n| = 10$

13)  $|x - 2| = 7$

14)  $|x + 4| = 2$

**CLASS EXAMPLES: Solve each equation.**

15)  $\frac{|p + 3|}{7} = 3$

16)  $|b + 9| - 1 = 6$

**Solve each equation.**

17)  $3|-7k| = 63$

18)  $|m + 1| + 6 = 12$

19)  $|m + 2| + 3 = 10$

20)  $|9x| - 7 = 56$

21)  $\left|\frac{p}{4}\right| + 4 = 6$

22)  $|x + 5| - 10 = 0$

23)  $|m + 3| - 6 = -4$

24)  $6 + \left|\frac{m}{9}\right| = 7$

**CHALLENGE PROBLEMS: Solve each equation.**

25)  $-9|6 + 8x| - 8 = -26$

26)  $-4 - 9|m + 8| = -94$