

Absolute Value Equations

Date _____ Period _____

Solve each equation.

1) $|n| = 3$

2) $|n| = 8$

3) $9|x| = 54$

4) $-7|n| = -42$

5) $-1 + 2|p| = 1$

6) $10 + 6|x| = 34$

7) $|k + 5| = 3$

8) $\left|\frac{m}{7}\right| = 1$

9) $|5n| - 1 = 29$

10) $\frac{|r - 3|}{2} = 3$

11) $4|m + 6| - 6 = 46$

12) $10|n + 6| + 2 = 42$

$$13) \quad |3 - 2n| = 11$$

$$14) \quad |2 - 7v| = 61$$

$$15) \quad \frac{|5n + 3|}{2} = 2$$

$$16) \quad 10|-10 - 2b| = 20$$

$$17) \quad -9|10 - 10a| + 9 = -81$$

$$18) \quad 5|-4n + 6| - 10 = 100$$

Absolute Value Equations

Date _____ Period _____

Solve each equation.

1) $|n| = 3$

 $\{3, -3\}$

2) $|n| = 8$

 $\{8, -8\}$

3) $9|x| = 54$

 $\{6, -6\}$

4) $-7|n| = -42$

 $\{6, -6\}$

5) $-1 + 2|p| = 1$

 $\{1, -1\}$

6) $10 + 6|x| = 34$

 $\{4, -4\}$

7) $|k + 5| = 3$

 $\{-2, -8\}$

8) $\left|\frac{m}{7}\right| = 1$

 $\{7, -7\}$

9) $|5n| - 1 = 29$

 $\{6, -6\}$

10) $\frac{|r - 3|}{2} = 3$

 $\{9, -3\}$

11) $4|m + 6| - 6 = 46$

 $\{7, -19\}$

12) $10|n + 6| + 2 = 42$

 $\{-2, -10\}$

$$13) \quad |3 - 2n| = 11$$

$$\{-4, 7\}$$

$$14) \quad |2 - 7v| = 61 \quad \left\{-\frac{59}{7}, 9\right\}$$

$$15) \quad \frac{|5n + 3|}{2} = 2$$

$$\left\{\frac{1}{5}, -\frac{7}{5}\right\}$$

$$16) \quad 10|-10 - 2b| = 20$$

$$\{-6, -4\}$$

$$17) \quad -9|10 - 10a| + 9 = -81$$

$$\{0, 2\}$$

$$18) \quad 5|-4n + 6| - 10 = 100$$

$$\{-4, 7\}$$