

3.1 Solve Linear and Absolute Value Practice

Date _____ Period _____

Solve each equation.

1) $-a + 3a = -2$

2) $n + 4n = -10$

3) $5n + 5 + 2n = -2$

4) $3(5n + 8) = 38 + 8n$

5) $-1 - 4(-5 - 8x) = -37 + 4x$

6) $-2(x + 2) = -22 - 5x$

7) $\frac{7}{15} = \frac{2}{3}k - \frac{1}{5}k$

8) $\frac{64}{9} = \frac{1}{3}n + \frac{9}{5}n$

9) $\frac{11}{3}n + \frac{1}{4}n = -\frac{235}{36}$

10) $\frac{25}{6} = \frac{5}{2}n + \frac{5}{3}n$

$$11) \left| \frac{n}{2} \right| = 2$$

$$12) \left| \frac{n}{3} \right| = 3$$

$$13) \left| -5 + m \right| = 3$$

$$14) \left| \frac{v}{4} \right| = 3$$

$$15) \left| -n - 5 \right| = -2$$

$$16) \left| -6n - 8 \right| = 44$$

$$17) \left| 4 + 6r \right| = 14$$

$$18) \left| 10n - 6 \right| = 66$$

$$19) \frac{\left| 9x + 2 \right|}{7} = 5$$

$$20) -7 \left| 7v + 7 \right| = -98$$

$$21) \left| 10 - 3b \right| + 6 = -5$$

$$22) \frac{\left| 10n - 3 \right|}{8} = 2$$

3.1 Solve Linear and Absolute Value Practice

Date _____ Period _____

Solve each equation.

1) $-a + 3a = -2$

 $\{-1\}$

2) $n + 4n = -10$

 $\{-2\}$

3) $5n + 5 + 2n = -2$

 $\{-1\}$

4) $3(5n + 8) = 38 + 8n$

 $\{2\}$

5) $-1 - 4(-5 - 8x) = -37 + 4x$

 $\{-2\}$

6) $-2(x + 2) = -22 - 5x$

 $\{-6\}$

7) $\frac{7}{15} = \frac{2}{3}k - \frac{1}{5}k$

 $\{1\}$

8) $\frac{64}{9} = \frac{1}{3}n + \frac{9}{5}n$

 $\left\{\frac{10}{3}\right\}$

9) $\frac{11}{3}n + \frac{1}{4}n = -\frac{235}{36}$

 $\left\{-\frac{5}{3}\right\}$

10) $\frac{25}{6} = \frac{5}{2}n + \frac{5}{3}n$

 $\{1\}$

$$11) \left| \frac{n}{2} \right| = 2$$
$$\{4, -4\}$$

$$12) \left| \frac{n}{3} \right| = 3$$
$$\{9, -9\}$$

$$13) |-5 + m| = 3$$
$$\{8, 2\}$$

$$14) \left| \frac{v}{4} \right| = 3$$
$$\{12, -12\}$$

$$15) |-n - 5| = -2$$

No solution.

$$16) |-6n - 8| = 44$$
$$\left\{ -\frac{26}{3}, 6 \right\}$$

$$17) |4 + 6r| = 14$$
$$\left\{ \frac{5}{3}, -3 \right\}$$

$$18) |10n - 6| = 66$$
$$\left\{ \frac{36}{5}, -6 \right\}$$

$$19) \frac{|9x + 2|}{7} = 5$$
$$\left\{ \frac{11}{3}, -\frac{37}{9} \right\}$$

$$20) -7|7v + 7| = -98$$
$$\{1, -3\}$$

$$21) |10 - 3b| + 6 = -5$$

No solution.

$$22) \frac{|10n - 3|}{8} = 2$$
$$\left\{ \frac{19}{10}, -\frac{13}{10} \right\}$$