

Worksheet 1.1

Solve each equation.

1) $-2k + 22 = 4(8k - 3)$
{1}

3) $-12 + b = 6 + 4(7 + 6b)$
{-2}

5) $-23 + 3n = 7 + 5(3n + 6)$
{-5}

7) $-9(v - 9) - 10 = -2(v + 3)$
{11}

9) $-6(1 - 8p) = -4p - 6(1 + 11p)$
{0}

11) $-\frac{13}{6}n - \frac{1}{2}n = -\frac{32}{5}$ $\left\{ \frac{12}{5} \right\}$

13) $\frac{8}{5}a + 1 - \frac{7}{5}a = \frac{7}{10}$ $\left\{ -\frac{3}{2} \right\}$

15) $m - \frac{10}{3} + \frac{3}{5}m = -\frac{98}{15}$
{-2}

17) $\left| \frac{x}{6} \right| = 1$
{6, -6}

19) $|-7k| = 56$
{-8, 8}

21) $|7a - 10| = 38$ $\left\{ \frac{48}{7}, -4 \right\}$

23) $|5n - 2| = 7$ $\left\{ \frac{9}{5}, -1 \right\}$

25) $|8x + 4| = 84$
{10, -11}

27) $|1 + 2a| = -7$
No solution.

2) $-8(2 - 3x) + 8 = 7x + 9$
{1}

4) $6(-4 + 5x) = 2 + 4x$
{1}

6) $-5 + 8(4 - 5x) = -2x - 11$
{1}

8) $-10(8 - 5v) - 10v = 8v + 8(2v - 12)$
{-1}

10) $-5(-11v - 1) = 5(7 + 9v)$
{3}

12) $-\frac{13}{36} = -\frac{1}{3}m + 1 + \frac{3}{2}m$ $\left\{ -\frac{7}{6} \right\}$

14) $\frac{4}{5}m + 1 - \frac{1}{5}m = \frac{49}{25}$ $\left\{ \frac{8}{5} \right\}$

16) $-\frac{7}{9} = \frac{5}{6}a - 2 - 1$ $\left\{ \frac{8}{3} \right\}$

18) $\left| \frac{a}{2} \right| = 4$
{8, -8}

20) $|x - 8| = 5$
{13, 3}

22) $|-8 - 5n| = 18$ $\left\{ -\frac{26}{5}, 2 \right\}$

24) $|5x + 1| = 0$ $\left\{ -\frac{1}{5} \right\}$

26) $|3 + 4m| = 0$ $\left\{ -\frac{3}{4} \right\}$

28) $|10r + 3| = 17$ $\left\{ \frac{7}{5}, -2 \right\}$