

Solving Addition Equations

$$\begin{aligned}1.8 &= -2.1 + x \\1.8 + 2.1 &= -2.1 + 2.1 + x \\3.9 &= 0 + x \\3.9 &= x\end{aligned}$$

1. $a + -7 = 8$

8. $-27 = c + 27$

2. $y + 76 = -93$

9. $-\frac{5}{8} + x = -\frac{5}{8}$

3. $4 + b = -14$

10. $y + -6.2 = 8.1$

4. $-33 = z + 16$

11. $38 = x + -19$

5. $-12 + x = 21$

12. $a + -2\frac{5}{9} = -10\frac{5}{18}$

6. $2.4 = m + 3.7$

13. $-1,129 + b = 3,331$

7. $-1\frac{1}{2} + n = -1\frac{5}{8}$

14. $-3.5 = 7\frac{1}{2} + x$

Solving Subtraction Equations

$$24 = x - 8$$

$$24 = x + 8$$

$$24 - 8 = x + 8 - 8$$

$$16 = x + 0$$

$$16 = x$$

1. $k - 36 = 37$

8. $-17 = q - 3$

2. $-22 = y - 8$

9. $p - \frac{3}{5} = \frac{3}{5}$

3. $x - 7 = -19$

10. $5.62 = m - 6$

4. $30 = b - 2$

11. $x - 36.5 = -2.563$

5. $a - 18 = -32$

12. $-1,132 = b - 6,339$

6. $-1.7 = b - 9.3$

13. $7\frac{3}{4} = a - 16\frac{3}{16}$

7. $-4\frac{1}{3} = q - 3\frac{1}{3}$

14. $z - 5.75 = -8\frac{1}{4}$

Solving Addition and Subtraction Equations

1. $x + ^{-}3 = ^{-}18$

11. $^{-}8.6 = m + 11.12$

2. $c - 11 = 43$

12. $a - ^{-}\frac{1}{5} = \frac{3}{20}$

3. $12 + y = 32$

13. $^{-}\frac{3}{4} + z = \frac{7}{18}$

4. $^{-}26 = d - 7$

14. $b - 17.8 = ^{-}36$

5. $^{-}62 = a + 16$

15. $^{-}\frac{13}{24} = ^{-}\frac{5}{16} + c$

6. $q - ^{-}83 = 121$

16. $102.8 = g - ^{-}66.09$

7. $t + ^{-}101 = 263$

17. $f + \frac{3}{5} = \frac{3}{4}$

8. $w - 454 = ^{-}832$

18. $b - \frac{5}{6} = ^{-}\frac{7}{8}$

9. $^{-}332 = ^{-}129 + s$

19. $21.21 + p = ^{-}101.6$

10. $665 = k - ^{-}327$

20. $^{-}762.46 = h - 32.061$

Solving Multiplication Equations

$$4y = -28$$

$$\frac{4y}{4} = -\frac{28}{4}$$

$$1y = -7$$

$$y = -7$$

1. $-6a = -66$

8. $9a = -3$

2. $-180 = 12b$

9. $0.25y = 1.5$

3. $-13n = 13$

10. $-0.0006 = 0.02x$

4. $42 = -14p$

11. $-11x = 275$

5. $1\frac{1}{2} = 3x$

12. $45\frac{1}{2} = -14c$

6. $-5.6 = -0.8x$

13. $61.44 = 12z$

7. $8 = -32b$

14. $-21y = -756$

Solving Division Equations

$$\begin{aligned}\frac{x}{4} &= -6 \\ 4 \cdot \frac{x}{4} &= -6 \cdot 4 \\ x &= -24\end{aligned}$$

1. $-18 = \frac{a}{6}$

8. $3 = -\frac{1}{8}a$

2. $\frac{x}{6} = -6$

9. $\frac{w}{-2} = 0.04$

3. $\frac{y}{-2} = 231$

10. $\frac{u}{-4} = -14$

4. $\frac{1}{5}b = -8$

11. $\frac{x}{-5.1} = -16$

5. $\frac{m}{0.6} = 0.3$

12. $-28 = \frac{a}{13}$

6. $35 = \frac{x}{-7}$

13. $\frac{1}{18}c = -31$

7. $0.12 = \frac{y}{0.12}$

14. $\frac{b}{-0.29} = 5.5$

Solving Equations with Two Operations

$$2y - 7 = -29$$

$$2y - 7 + 7 = -29 + 7$$

$$2y = -22$$

$$\frac{2y}{2} = \frac{-22}{2}$$

$$y = -11$$

1. $13 + -3p = -2$

7. $-7r - 8 = -14$

2. $\frac{-5a}{2} = 75$

8. $\frac{4y}{3} = 8$

3. $6x - 4 = -10$

9. $16 + \frac{x}{3} = -10$

4. $9 = 2y + 9$

10. $\frac{-4z}{5} = -12$

5. $-10 + \frac{a}{4} = 9$

11. $-22 = 3s - 8$

6. $17 = 5 - x$

12. $-\frac{a}{6} - -31 = 64$

Solving Equations with Negative Variables

$$\frac{-k}{6} + 1 = -5$$

$$\frac{-k}{6} + 1 - 1 = -5 - 1$$

$$\frac{-k}{6} \cdot 6 = -6 \cdot 6$$

$$-k = -36$$

$$k = 36$$

1. $-8 - y = 22$

7. $-82 = -a$

2. $18 = -k + 3$

8. $\frac{-b}{3} + 50 = 100$

3. $4 - \frac{x}{5} = -16$

9. $-6 - x\frac{1}{9} = -18$

4. $-x - 15 = -15$

10. $-3z + 5 = 38$

5. $-z = 11$

11. $-a\frac{1}{2} + 12 = -9$

6. $-28 = \frac{-y}{4} - 12$

12. $-5y - -7 = 52$