

Simple Linear Equations (A)

Solve for each variable.

1. $\frac{a}{8} = -4$

6. $2z = 2$

11. $10 - \frac{b}{2} = 3$

2. $b - (-5) = 13$

7. $-1 - \frac{y}{8} = -7$

12. $\frac{y}{-7} = -7$

3. $3 + \frac{18}{z} = 12$

8. $\frac{8}{u} - (-2) = 6$

13. $\frac{b}{7} = -5$

4. $-9 + \frac{36}{a} = -5$

9. $a - 2 = -10$

14. $\frac{-2}{c} = 2$

5. $u + 2 = -8$

10. $\frac{u}{6} = 3$

15. $\frac{c}{5} + 3 = 8$

Simple Linear Equations (A) Answers

Solve for each variable.

$$1. \frac{a}{8} = -4$$
$$a = -32$$

$$6. 2z = 2$$
$$z = 1$$

$$11. 10 - \frac{b}{2} = 3$$
$$b = 14$$

$$2. b - (-5) = 13$$
$$b = 8$$

$$7. -1 - \frac{y}{8} = -7$$
$$y = 48$$

$$12. \frac{y}{-7} = -7$$
$$y = 49$$

$$3. 3 + \frac{18}{z} = 12$$
$$z = 2$$

$$8. \frac{8}{u} - (-2) = 6$$
$$u = 2$$

$$13. \frac{b}{7} = -5$$
$$b = -35$$

$$4. -9 + \frac{36}{a} = -5$$
$$a = 9$$

$$9. a - 2 = -10$$
$$a = -8$$

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

$$5. u + 2 = -8$$
$$u = -10$$

$$10. \frac{u}{6} = 3$$
$$u = 18$$

$$15. \frac{c}{5} + 3 = 8$$
$$c = 25$$

Simple Linear Equations (B)

Solve for each variable.

1. $-2u - 5 = -21$

6. $\frac{-36}{x} = 9$

11. $\frac{z}{8} = -8$

2. $\frac{v}{5} - (-1) = 9$

7. $\frac{a}{7} = 6$

12. $\frac{x}{-6} = -8$

3. $\frac{-12}{b} = 4$

8. $\frac{12}{y} - 7 = -4$

13. $7a = -21$

4. $\frac{a}{6} = 3$

9. $\frac{-12}{b} = 6$

14. $\frac{a}{9} = 3$

5. $\frac{b}{-7} - 10 = -15$

10. $-3u = -6$

15. $\frac{u}{-6} + 4 = 2$

Simple Linear Equations (B) Answers

Solve for each variable.

$$1. -2u - 5 = -21$$
$$u = 8$$

$$6. \frac{-36}{x} = 9$$
$$x = -4$$

$$11. \frac{z}{8} = -8$$
$$z = -64$$

$$2. \frac{v}{5} - (-1) = 9$$
$$v = 40$$

$$7. \frac{a}{7} = 6$$
$$a = 42$$

$$12. \frac{x}{-6} = -8$$
$$x = 48$$

$$3. \frac{-12}{b} = 4$$
$$b = -3$$

$$8. \frac{12}{y} - 7 = -4$$
$$y = 4$$

$$13. 7a = -21$$
$$a = -3$$

$$4. \frac{a}{6} = 3$$
$$a = 18$$

$$9. \frac{-12}{b} = 6$$
$$b = -2$$

$$14. \frac{a}{9} = 3$$
$$a = 27$$

$$5. \frac{b}{-7} - 10 = -15$$
$$b = 35$$

$$10. -3u = -6$$
$$u = 2$$

$$15. \frac{u}{-6} + 4 = 2$$
$$u = 12$$

Simple Linear Equations (C)

Solve for each variable.

1. $2u - (-1) = -9$

6. $\frac{5}{z} - 10 = -5$

11. $3b + (-4) = -16$

2. $\frac{-81}{z} - (-10) = 1$

7. $\frac{b}{7} - 1 = 5$

12. $10 + \frac{24}{x} = 13$

3. $\frac{36}{u} = 6$

8. $\frac{30}{c} + 9 = 15$

13. $\frac{y}{8} = -5$

4. $-6v = -42$

9. $y - 10 = -5$

14. $x + 3 = -7$

5. $c - 6 = -14$

10. $\frac{-45}{y} = 9$

15. $6 - \frac{27}{u} = 15$

Simple Linear Equations (C) Answers

Solve for each variable.

1. $2u - (-1) = -9$
 $u = -5$

6. $\frac{5}{z} - 10 = -5$
 $z = 1$

11. $3b + (-4) = -16$
 $b = -4$

2. $\frac{-81}{z} - (-10) = 1$
 $z = 9$

7. $\frac{b}{7} - 1 = 5$
 $b = 42$

12. $10 + \frac{24}{x} = 13$
 $x = 8$

3. $\frac{36}{u} = 6$
 $u = 6$

8. $\frac{30}{c} + 9 = 15$
 $c = 5$

13. $\frac{y}{8} = -5$
 $y = -40$

4. $-6v = -42$
 $v = 7$

9. $y - 10 = -5$
 $y = 5$

14. $x + 3 = -7$
 $x = -10$

5. $c - 6 = -14$
 $c = -8$

10. $\frac{-45}{y} = 9$
 $y = -5$

15. $6 - \frac{27}{u} = 15$
 $u = -3$

Simple Linear Equations (D)

Solve for each variable.

1. $\frac{u}{8} - 1 = -5$

6. $3c + 2 = 20$

11. $z + 7 = 3$

2. $u - 2 = -6$

7. $\frac{a}{7} = 5$

12. $\frac{a}{-8} - 7 = -5$

3. $\frac{u}{7} = 9$

8. $\frac{x}{4} = -6$

13. $\frac{18}{c} = -6$

4. $-6 - \frac{-30}{z} = -11$

9. $-2z + 9 = 19$

14. $\frac{-64}{z} = 8$

5. $-3 - \frac{32}{u} = 5$

10. $5v = 20$

15. $5v = -25$

Simple Linear Equations (D) Answers

Solve for each variable.

$$1. \frac{u}{8} - 1 = -5$$
$$u = -32$$

$$6. 3c + 2 = 20$$
$$c = 6$$

$$11. z + 7 = 3$$
$$z = -4$$

$$2. u - 2 = -6$$
$$u = -4$$

$$7. \frac{a}{7} = 5$$
$$a = 35$$

$$12. \frac{a}{-8} - 7 = -5$$
$$a = -16$$

$$3. \frac{u}{7} = 9$$
$$u = 63$$

$$8. \frac{x}{4} = -6$$
$$x = -24$$

$$13. \frac{18}{c} = -6$$
$$c = -3$$

$$4. -6 - \frac{-30}{z} = -11$$
$$z = -6$$

$$9. -2z + 9 = 19$$
$$z = -5$$

$$14. \frac{-64}{z} = 8$$
$$z = -8$$

$$5. -3 - \frac{32}{u} = 5$$
$$u = -4$$

$$10. 5v = 20$$
$$v = 4$$

$$15. 5v = -25$$
$$v = -5$$

Simple Linear Equations (E)

Solve for each variable.

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

6. $\frac{u}{9} = 3$

11. $-6v = -48$

2. $\frac{y}{-9} = 7$

7. $-2u + (-7) = -7$

12. $\frac{-6}{v} = -6$

3. $\frac{54}{u} = 6$

8. $6x = 60$

13. $x - 7 = -17$

4. $-2u - (-10) = -2$

9. $b + 4 = 1$

14. $\frac{a}{7} - (-10) = 6$

5. $u - 3 = 1$

10. $9c = -54$

15. $\frac{-10}{v} = -5$

Simple Linear Equations (E) Answers

Solve for each variable.

$$1. \frac{v}{-5} - 8 = -4$$
$$v = -20$$

$$6. \frac{u}{9} = 3$$
$$u = 27$$

$$11. -6v = -48$$
$$v = 8$$

$$2. \frac{y}{-9} = 7$$
$$y = -63$$

$$7. -2u + (-7) = -7$$
$$u = 0$$

$$12. \frac{-6}{v} = -6$$
$$v = 1$$

$$3. \frac{54}{u} = 6$$
$$u = 9$$

$$8. 6x = 60$$
$$x = 10$$

$$13. x - 7 = -17$$
$$x = -10$$

$$4. -2u - (-10) = -2$$
$$u = 6$$

$$9. b + 4 = 1$$
$$b = -3$$

$$14. \frac{a}{7} - (-10) = 6$$
$$a = -28$$

$$5. u - 3 = 1$$
$$u = 4$$

$$10. 9c = -54$$
$$c = -6$$

$$15. \frac{-10}{v} = -5$$
$$v = 2$$

Simple Linear Equations (F)

Solve for each variable.

1. $-3a - (-4) = 25$

6. $\frac{8}{z} - 5 = 3$

11. $9c = 90$

2. $3x + 3 = 6$

7. $2b = 6$

12. $7 - \frac{a}{4} = -2$

3. $b + 3 = 5$

8. $v + (-2) = -3$

13. $\frac{v}{-8} = 4$

4. $2 - \frac{x}{4} = 11$

9. $u - (-4) = 5$

14. $\frac{y}{2} = -5$

5. $-6z = -12$

10. $2c - 10 = -8$

15. $-10 + \frac{z}{-2} = -8$

Simple Linear Equations (F) Answers

Solve for each variable.

$$1. -3a - (-4) = 25$$
$$a = -7$$

$$6. \frac{8}{z} - 5 = 3$$
$$z = 1$$

$$11. 9c = 90$$
$$c = 10$$

$$2. 3x + 3 = 6$$
$$x = 1$$

$$7. 2b = 6$$
$$b = 3$$

$$12. 7 - \frac{a}{4} = -2$$
$$a = 36$$

$$3. b + 3 = 5$$
$$b = 2$$

$$8. v + (-2) = -3$$
$$v = -1$$

$$13. \frac{v}{-8} = 4$$
$$v = -32$$

$$4. 2 - \frac{x}{4} = 11$$
$$x = -36$$

$$9. u - (-4) = 5$$
$$u = 1$$

$$14. \frac{y}{2} = -5$$
$$y = -10$$

$$5. -6z = -12$$
$$z = 2$$

$$10. 2c - 10 = -8$$
$$c = 1$$

$$15. -10 + \frac{z}{-2} = -8$$
$$z = -4$$

Simple Linear Equations (G)

Solve for each variable.

1. $\frac{z}{2} = -7$

6. $3x = -15$

11. $u - 2 = 6$

2. $\frac{b}{6} - 5 = -8$

7. $c + 9 = 3$

12. $3u + 2 = 5$

3. $-4 + \frac{u}{8} = -8$

8. $9z = 72$

13. $4 - \frac{-8}{v} = 6$

4. $6 - \frac{c}{4} = -3$

9. $2c - 10 = -28$

14. $\frac{u}{3} = 4$

5. $b - 3 = -8$

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

15. $8 + \frac{v}{2} = 15$

Simple Linear Equations (G) Answers

Solve for each variable.

$$1. \frac{z}{2} = -7$$
$$z = -14$$

$$6. 3x = -15$$
$$x = -5$$

$$11. u - 2 = 6$$
$$u = 8$$

$$2. \frac{b}{6} - 5 = -8$$
$$b = -18$$

$$7. c + 9 = 3$$
$$c = -6$$

$$12. 3u + 2 = 5$$
$$u = 1$$

$$3. -4 + \frac{u}{8} = -8$$
$$u = -32$$

$$8. 9z = 72$$
$$z = 8$$

$$13. 4 - \frac{-8}{v} = 6$$
$$v = 4$$

$$4. 6 - \frac{c}{4} = -3$$
$$c = 36$$

$$9. 2c - 10 = -28$$
$$c = -9$$

$$14. \frac{u}{3} = 4$$
$$u = 12$$

$$5. b - 3 = -8$$
$$b = -5$$

$$10. \frac{a}{5} - 2 = -9$$
$$a = -35$$

$$15. 8 + \frac{v}{2} = 15$$
$$v = 14$$

Simple Linear Equations (H)

Solve for each variable.

1. $2 - \frac{v}{3} = 6$

6. $\frac{-24}{b} = -3$

11. $3u = 15$

2. $\frac{u}{9} = -4$

7. $1 - \frac{b}{7} = -4$

12. $3u + (-4) = -13$

3. $\frac{-80}{y} - (-10) = 18$

8. $6 - \frac{v}{-8} = 2$

13. $\frac{7}{y} = -7$

4. $z - 7 = -6$

9. $\frac{y}{-4} - 9 = -17$

14. $y + 6 = -4$

5. $\frac{a}{5} = -8$

10. $6 - \frac{u}{-7} = 2$

15. $\frac{z}{9} = -9$

Simple Linear Equations (H) Answers

Solve for each variable.

$$1. 2 - \frac{v}{3} = 6$$
$$v = -12$$

$$6. \frac{-24}{b} = -3$$
$$b = 8$$

$$11. 3u = 15$$
$$u = 5$$

$$2. \frac{u}{9} = -4$$
$$u = -36$$

$$7. 1 - \frac{b}{7} = -4$$
$$b = 35$$

$$12. 3u + (-4) = -13$$
$$u = -3$$

$$3. \frac{-80}{y} - (-10) = 18$$
$$y = -10$$

$$8. 6 - \frac{v}{-8} = 2$$
$$v = -32$$

$$13. \frac{7}{y} = -7$$
$$y = -1$$

$$4. z - 7 = -6$$
$$z = 1$$

$$9. \frac{y}{-4} - 9 = -17$$
$$y = 32$$

$$14. y + 6 = -4$$
$$y = -10$$

$$5. \frac{a}{5} = -8$$
$$a = -40$$

$$10. 6 - \frac{u}{-7} = 2$$
$$u = -28$$

$$15. \frac{z}{9} = -9$$
$$z = -81$$

Simple Linear Equations (I)

Solve for each variable.

1. $x + 6 = -4$

6. $-3z - 7 = 8$

11. $\frac{v}{-6} = 5$

2. $-3u = 3$

7. $-4 - \frac{a}{9} = -8$

12. $\frac{-24}{x} + 5 = 9$

3. $b + (-8) = -13$

8. $\frac{y}{2} = 3$

13. $v - 1 = 3$

4. $\frac{c}{8} = 9$

9. $-8 - \frac{-9}{y} = -11$

14. $\frac{z}{3} = 3$

5. $v + (-10) = -1$

10. $\frac{-45}{c} = 5$

15. $8 - \frac{z}{-9} = 2$

Simple Linear Equations (I) Answers

Solve for each variable.

$$1. \begin{aligned} x + 6 &= -4 \\ x &= -10 \end{aligned}$$

$$6. \begin{aligned} -3z - 7 &= 8 \\ z &= -5 \end{aligned}$$

$$11. \begin{aligned} \frac{v}{-6} &= 5 \\ v &= -30 \end{aligned}$$

$$2. \begin{aligned} -3u &= 3 \\ u &= -1 \end{aligned}$$

$$7. \begin{aligned} -4 - \frac{a}{9} &= -8 \\ a &= 36 \end{aligned}$$

$$12. \begin{aligned} \frac{-24}{x} + 5 &= 9 \\ x &= -6 \end{aligned}$$

$$3. \begin{aligned} b + (-8) &= -13 \\ b &= -5 \end{aligned}$$

$$8. \begin{aligned} \frac{y}{2} &= 3 \\ y &= 6 \end{aligned}$$

$$13. \begin{aligned} v - 1 &= 3 \\ v &= 4 \end{aligned}$$

$$4. \begin{aligned} \frac{c}{8} &= 9 \\ c &= 72 \end{aligned}$$

$$9. \begin{aligned} -8 - \frac{-9}{y} &= -11 \\ y &= -3 \end{aligned}$$

$$14. \begin{aligned} \frac{z}{3} &= 3 \\ z &= 9 \end{aligned}$$

$$5. \begin{aligned} v + (-10) &= -1 \\ v &= 9 \end{aligned}$$

$$10. \begin{aligned} \frac{-45}{c} &= 5 \\ c &= -9 \end{aligned}$$

$$15. \begin{aligned} 8 - \frac{z}{-9} &= 2 \\ z &= -54 \end{aligned}$$

Simple Linear Equations (J)

Solve for each variable.

1. $\frac{-12}{y} - (-4) = 7$

6. $b - 3 = -7$

11. $\frac{c}{9} - 10 = -1$

2. $-9z = -72$

7. $\frac{-56}{u} - (-10) = 18$

12. $\frac{c}{8} = -8$

3. $-2b + 7 = 21$

8. $\frac{b}{-4} = 7$

13. $3b = -6$

4. $\frac{x}{8} = 8$

9. $\frac{-20}{y} = 2$

14. $\frac{-30}{c} - 4 = -1$

5. $9 + \frac{z}{3} = 17$

10. $\frac{72}{x} = 9$

15. $6 - \frac{50}{a} = 1$

Simple Linear Equations (J) Answers

Solve for each variable.

$$1. \frac{-12}{y} - (-4) = 7$$
$$y = -4$$

$$6. b - 3 = -7$$
$$b = -4$$

$$11. \frac{c}{9} - 10 = -1$$
$$c = 81$$

$$2. -9z = -72$$
$$z = 8$$

$$7. \frac{-56}{u} - (-10) = 18$$
$$u = -7$$

$$12. \frac{c}{8} = -8$$
$$c = -64$$

$$3. -2b + 7 = 21$$
$$b = -7$$

$$8. \frac{b}{-4} = 7$$
$$b = -28$$

$$13. 3b = -6$$
$$b = -2$$

$$4. \frac{x}{8} = 8$$
$$x = 64$$

$$9. \frac{-20}{y} = 2$$
$$y = -10$$

$$14. \frac{-30}{c} - 4 = -1$$
$$c = -10$$

$$5. 9 + \frac{z}{3} = 17$$
$$z = 24$$

$$10. \frac{72}{x} = 9$$
$$x = 8$$

$$15. 6 - \frac{50}{a} = 1$$
$$a = 10$$