

Simple Linear Equations (A)

Solve for each variable.

1. $8 + \frac{2}{z} = 10$

6. $9x = 9$

11. $\frac{2}{v} + 7 = 9$

2. $3v - 4 = 5$

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

12. $7z = 63$

3. $\frac{z}{5} + 10 = 13$

8. $\frac{b}{5} = 7$

13. $\frac{6}{c} = 2$

4. $\frac{12}{v} = 2$

9. $\frac{v}{2} = 3$

14. $\frac{42}{z} = 7$

5. $3c - 6 = 21$

10. $\frac{90}{x} + 3 = 12$

15. $\frac{24}{b} = 4$

Simple Linear Equations (A) Answers

Solve for each variable.

$$1. 8 + \frac{2}{z} = 10$$
$$z = 1$$

$$6. 9x = 9$$
$$x = 1$$

$$11. \frac{2}{v} + 7 = 9$$
$$v = 1$$

$$2. 3v - 4 = 5$$
$$v = 3$$

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

$$12. 7z = 63$$
$$z = 9$$

$$3. \frac{z}{5} + 10 = 13$$
$$z = 15$$

$$8. \frac{b}{5} = 7$$
$$b = 35$$

$$13. \frac{6}{c} = 2$$
$$c = 3$$

$$4. \frac{12}{v} = 2$$
$$v = 6$$

$$9. \frac{v}{2} = 3$$
$$v = 6$$

$$14. \frac{42}{z} = 7$$
$$z = 6$$

$$5. 3c - 6 = 21$$
$$c = 9$$

$$10. \frac{90}{x} + 3 = 12$$
$$x = 10$$

$$15. \frac{24}{b} = 4$$
$$b = 6$$

Simple Linear Equations (B)

Solve for each variable.

1. $\frac{8}{z} = 8$

6. $\frac{10}{z} = 2$

11. $\frac{b}{8} = 5$

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

7. $\frac{a}{6} - 3 = 0$

12. $\frac{c}{2} = 7$

3. $\frac{a}{9} + 8 = 14$

8. $\frac{y}{3} = 9$

13. $\frac{8}{b} = 2$

4. $b + 8 = 14$

9. $\frac{49}{y} + 7 = 14$

14. $5b = 20$

5. $7 + \frac{12}{b} = 13$

10. $\frac{12}{z} = 6$

15. $u + 3 = 9$

Simple Linear Equations (B) Answers

Solve for each variable.

$$1. \frac{8}{z} = 8$$
$$z = 1$$

$$6. \frac{10}{z} = 2$$
$$z = 5$$

$$11. \frac{b}{8} = 5$$
$$b = 40$$

$$2. \frac{a}{3} = 6$$
$$a = 18$$

$$7. \frac{a}{6} - 3 = 0$$
$$a = 18$$

$$12. \frac{c}{2} = 7$$
$$c = 14$$

$$3. \frac{a}{9} + 8 = 14$$
$$a = 54$$

$$8. \frac{y}{3} = 9$$
$$y = 27$$

$$13. \frac{8}{b} = 2$$
$$b = 4$$

$$4. b + 8 = 14$$
$$b = 6$$

$$9. \frac{49}{y} + 7 = 14$$
$$y = 7$$

$$14. 5b = 20$$
$$b = 4$$

$$5. 7 + \frac{12}{b} = 13$$
$$b = 2$$

$$10. \frac{12}{z} = 6$$
$$z = 2$$

$$15. u + 3 = 9$$
$$u = 6$$

Simple Linear Equations (C)

Solve for each variable.

1. $3 + \frac{54}{x} = 9$

6. $7x = 28$

11. $\frac{54}{b} = 6$

2. $\frac{49}{c} + 10 = 17$

7. $1 + \frac{b}{3} = 5$

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

3. $3v + 2 = 14$

8. $\frac{90}{a} = 9$

13. $4z = 12$

4. $9u = 18$

9. $c - 2 = 4$

14. $8 + \frac{z}{2} = 11$

5. $\frac{21}{b} = 7$

10. $8y = 40$

15. $\frac{u}{6} - 4 = 5$

Simple Linear Equations (C) Answers

Solve for each variable.

$$1. 3 + \frac{54}{x} = 9$$
$$x = 9$$

$$6. 7x = 28$$
$$x = 4$$

$$11. \frac{54}{b} = 6$$
$$b = 9$$

$$2. \frac{49}{c} + 10 = 17$$
$$c = 7$$

$$7. 1 + \frac{b}{3} = 5$$
$$b = 12$$

$$12. \frac{a}{6} = 7$$
$$a = 42$$

$$3. 3v + 2 = 14$$
$$v = 4$$

$$8. \frac{90}{a} = 9$$
$$a = 10$$

$$13. 4z = 12$$
$$z = 3$$

$$4. 9u = 18$$
$$u = 2$$

$$9. c - 2 = 4$$
$$c = 6$$

$$14. 8 + \frac{z}{2} = 11$$
$$z = 6$$

$$5. \frac{21}{b} = 7$$
$$b = 3$$

$$10. 8y = 40$$
$$y = 5$$

$$15. \frac{u}{6} - 4 = 5$$
$$u = 54$$

Simple Linear Equations (D)

Solve for each variable.

1. $\frac{2}{x} + 7 = 9$

6. $\frac{2}{c} = 2$

11. $3v + 10 = 25$

2. $\frac{15}{y} = 5$

7. $2x - 7 = 13$

12. $u + 10 = 17$

3. $9 - \frac{a}{4} = 2$

8. $x + 6 = 11$

13. $5b = 5$

4. $b + 9 = 18$

9. $3u - 3 = 3$

14. $3u + 3 = 15$

5. $u + 7 = 9$

10. $\frac{35}{y} = 5$

15. $\frac{21}{a} = 7$

Simple Linear Equations (D) Answers

Solve for each variable.

$$1. \frac{2}{x} + 7 = 9$$
$$x = 1$$

$$6. \frac{2}{c} = 2$$
$$c = 1$$

$$11. 3v + 10 = 25$$
$$v = 5$$

$$2. \frac{15}{y} = 5$$
$$y = 3$$

$$7. 2x - 7 = 13$$
$$x = 10$$

$$12. u + 10 = 17$$
$$u = 7$$

$$3. 9 - \frac{a}{4} = 2$$
$$a = 28$$

$$8. x + 6 = 11$$
$$x = 5$$

$$13. 5b = 5$$
$$b = 1$$

$$4. b + 9 = 18$$
$$b = 9$$

$$9. 3u - 3 = 3$$
$$u = 2$$

$$14. 3u + 3 = 15$$
$$u = 4$$

$$5. u + 7 = 9$$
$$u = 2$$

$$10. \frac{35}{y} = 5$$
$$y = 7$$

$$15. \frac{21}{a} = 7$$
$$a = 3$$

Simple Linear Equations (E)

Solve for each variable.

1. $\frac{80}{v} = 8$

6. $9 - \frac{x}{7} = 7$

11. $\frac{28}{c} = 7$

2. $\frac{b}{7} = 6$

7. $10 + \frac{u}{2} = 14$

12. $c + 4 = 9$

3. $\frac{y}{9} = 8$

8. $10 + \frac{z}{6} = 12$

13. $x - 5 = 4$

4. $\frac{63}{a} + 4 = 11$

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

14. $8v = 8$

5. $5b = 10$

10. $y - 2 = 3$

15. $7c = 21$

Simple Linear Equations (E) Answers

Solve for each variable.

$$1. \frac{80}{v} = 8$$
$$v = 10$$

$$6. 9 - \frac{x}{7} = 7$$
$$x = 14$$

$$11. \frac{28}{c} = 7$$
$$c = 4$$

$$2. \frac{b}{7} = 6$$
$$b = 42$$

$$7. 10 + \frac{u}{2} = 14$$
$$u = 8$$

$$12. c + 4 = 9$$
$$c = 5$$

$$3. \frac{y}{9} = 8$$
$$y = 72$$

$$8. 10 + \frac{z}{6} = 12$$
$$z = 12$$

$$13. x - 5 = 4$$
$$x = 9$$

$$4. \frac{63}{a} + 4 = 11$$
$$a = 9$$

$$9. \frac{8}{a} = 4$$
$$a = 2$$

$$14. 8v = 8$$
$$v = 1$$

$$5. 5b = 10$$
$$b = 2$$

$$10. y - 2 = 3$$
$$y = 5$$

$$15. 7c = 21$$
$$c = 3$$

Simple Linear Equations (F)

Solve for each variable.

1. $\frac{6}{y} = 3$

6. $2v = 8$

11. $2y + 5 = 25$

2. $\frac{16}{c} = 8$

7. $x - 2 = 1$

12. $u + 9 = 19$

3. $8 + \frac{20}{c} = 10$

8. $6 + \frac{8}{v} = 8$

13. $y - 3 = 2$

4. $8c = 72$

9. $\frac{35}{c} + 8 = 13$

14. $\frac{24}{a} + 3 = 11$

5. $\frac{36}{v} = 9$

10. $3y - 6 = 0$

15. $u + 4 = 14$

Simple Linear Equations (F) Answers

Solve for each variable.

$$1. \frac{6}{y} = 3$$
$$y = 2$$

$$6. 2v = 8$$
$$v = 4$$

$$11. 2y + 5 = 25$$
$$y = 10$$

$$2. \frac{16}{c} = 8$$
$$c = 2$$

$$7. x - 2 = 1$$
$$x = 3$$

$$12. u + 9 = 19$$
$$u = 10$$

$$3. 8 + \frac{20}{c} = 10$$
$$c = 10$$

$$8. 6 + \frac{8}{v} = 8$$
$$v = 4$$

$$13. y - 3 = 2$$
$$y = 5$$

$$4. 8c = 72$$
$$c = 9$$

$$9. \frac{35}{c} + 8 = 13$$
$$c = 7$$

$$14. \frac{24}{a} + 3 = 11$$
$$a = 3$$

$$5. \frac{36}{v} = 9$$
$$v = 4$$

$$10. 3y - 6 = 0$$
$$y = 2$$

$$15. u + 4 = 14$$
$$u = 10$$

Simple Linear Equations (G)

Solve for each variable.

1. $\frac{x}{5} = 6$

6. $\frac{v}{7} = 9$

11. $3c + 8 = 17$

2. $3b + 4 = 4$

7. $\frac{b}{8} = 9$

12. $\frac{b}{7} + 1 = 10$

3. $\frac{14}{c} = 7$

8. $3x + 4 = 34$

13. $7x = 56$

4. $10 - \frac{u}{3} = 7$

9. $\frac{25}{u} = 5$

14. $3b - 5 = 13$

5. $b + 5 = 5$

10. $x + 9 = 12$

15. $a - 3 = 4$

Simple Linear Equations (G) Answers

Solve for each variable.

1. $\frac{x}{5} = 6$
 $x = 30$

6. $\frac{v}{7} = 9$
 $v = 63$

11. $3c + 8 = 17$
 $c = 3$

2. $3b + 4 = 4$
 $b = 0$

7. $\frac{b}{8} = 9$
 $b = 72$

12. $\frac{b}{7} + 1 = 10$
 $b = 63$

3. $\frac{14}{c} = 7$
 $c = 2$

8. $3x + 4 = 34$
 $x = 10$

13. $7x = 56$
 $x = 8$

4. $10 - \frac{u}{3} = 7$
 $u = 9$

9. $\frac{25}{u} = 5$
 $u = 5$

14. $3b - 5 = 13$
 $b = 6$

5. $b + 5 = 5$
 $b = 0$

10. $x + 9 = 12$
 $x = 3$

15. $a - 3 = 4$
 $a = 7$

Simple Linear Equations (H)

Solve for each variable.

1. $\frac{20}{a} - 1 = 4$

6. $\frac{18}{z} = 6$

11. $\frac{b}{2} + 5 = 8$

2. $\frac{18}{y} = 3$

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

12. $6a = 0$

3. $\frac{30}{u} = 6$

8. $z - 3 = 7$

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

4. $1 + \frac{12}{y} = 3$

9. $6x = 12$

14. $x - 1 = 7$

5. $\frac{a}{8} = 3$

10. $2v = 4$

15. $z + 7 = 8$

Simple Linear Equations (H) Answers

Solve for each variable.

$$1. \frac{20}{a} - 1 = 4$$
$$a = 4$$

$$6. \frac{18}{z} = 6$$
$$z = 3$$

$$11. \frac{b}{2} + 5 = 8$$
$$b = 6$$

$$2. \frac{18}{y} = 3$$
$$y = 6$$

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

$$12. 6a = 0$$
$$a = 0$$

$$3. \frac{30}{u} = 6$$
$$u = 5$$

$$8. z - 3 = 7$$
$$z = 10$$

$$13. 8 - \frac{x}{8} = 5$$
$$x = 24$$

$$4. 1 + \frac{12}{y} = 3$$
$$y = 6$$

$$9. 6x = 12$$
$$x = 2$$

$$14. x - 1 = 7$$
$$x = 8$$

$$5. \frac{a}{8} = 3$$
$$a = 24$$

$$10. 2v = 4$$
$$v = 2$$

$$15. z + 7 = 8$$
$$z = 1$$

Simple Linear Equations (I)

Solve for each variable.

1. $2a + 6 = 18$

6. $3a + 4 = 19$

11. $2b - 1 = 5$

2. $5a = 50$

7. $\frac{21}{z} = 7$

12. $3x + 7 = 31$

3. $\frac{a}{5} - 6 = 0$

8. $9 + \frac{z}{5} = 13$

13. $\frac{z}{9} = 5$

4. $y - 2 = 8$

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

14. $3y - 5 = 7$

5. $3v + 8 = 32$

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

15. $\frac{c}{2} = 4$

Simple Linear Equations (I) Answers

Solve for each variable.

$$1. \begin{aligned} 2a + 6 &= 18 \\ a &= 6 \end{aligned}$$

$$6. \begin{aligned} 3a + 4 &= 19 \\ a &= 5 \end{aligned}$$

$$11. \begin{aligned} 2b - 1 &= 5 \\ b &= 3 \end{aligned}$$

$$2. \begin{aligned} 5a &= 50 \\ a &= 10 \end{aligned}$$

$$7. \begin{aligned} \frac{21}{z} &= 7 \\ z &= 3 \end{aligned}$$

$$12. \begin{aligned} 3x + 7 &= 31 \\ x &= 8 \end{aligned}$$

$$3. \begin{aligned} \frac{a}{5} - 6 &= 0 \\ a &= 30 \end{aligned}$$

$$8. \begin{aligned} 9 + \frac{z}{5} &= 13 \\ z &= 20 \end{aligned}$$

$$13. \begin{aligned} \frac{z}{9} &= 5 \\ z &= 45 \end{aligned}$$

$$4. \begin{aligned} y - 2 &= 8 \\ y &= 10 \end{aligned}$$

$$9. \begin{aligned} \frac{z}{3} &= 6 \\ z &= 18 \end{aligned}$$

$$14. \begin{aligned} 3y - 5 &= 7 \\ y &= 4 \end{aligned}$$

$$5. \begin{aligned} 3v + 8 &= 32 \\ v &= 8 \end{aligned}$$

$$10. \begin{aligned} \frac{72}{c} &= 9 \\ c &= 8 \end{aligned}$$

$$15. \begin{aligned} \frac{c}{2} &= 4 \\ c &= 8 \end{aligned}$$

Simple Linear Equations (J)

Solve for each variable.

1. $x - 2 = 2$

6. $7b = 56$

11. $b + 5 = 12$

2. $9a = 90$

7. $\frac{70}{y} + 8 = 15$

12. $\frac{c}{8} = 3$

3. $2b - 1 = 11$

8. $\frac{54}{b} = 9$

13. $5 + \frac{10}{b} = 10$

4. $\frac{2}{x} - 1 = 1$

9. $\frac{z}{9} = 5$

14. $\frac{v}{8} = 7$

5. $6z = 18$

10. $\frac{u}{4} = 2$

15. $a + 6 = 7$

Simple Linear Equations (J) Answers

Solve for each variable.

$$1. \begin{aligned} x - 2 &= 2 \\ x &= 4 \end{aligned}$$

$$6. \begin{aligned} 7b &= 56 \\ b &= 8 \end{aligned}$$

$$11. \begin{aligned} b + 5 &= 12 \\ b &= 7 \end{aligned}$$

$$2. \begin{aligned} 9a &= 90 \\ a &= 10 \end{aligned}$$

$$7. \begin{aligned} \frac{70}{y} + 8 &= 15 \\ y &= 10 \end{aligned}$$

$$12. \begin{aligned} \frac{c}{8} &= 3 \\ c &= 24 \end{aligned}$$

$$3. \begin{aligned} 2b - 1 &= 11 \\ b &= 6 \end{aligned}$$

$$8. \begin{aligned} \frac{54}{b} &= 9 \\ b &= 6 \end{aligned}$$

$$13. \begin{aligned} 5 + \frac{10}{b} &= 10 \\ b &= 2 \end{aligned}$$

$$4. \begin{aligned} \frac{2}{x} - 1 &= 1 \\ x &= 1 \end{aligned}$$

$$9. \begin{aligned} \frac{z}{9} &= 5 \\ z &= 45 \end{aligned}$$

$$14. \begin{aligned} \frac{v}{8} &= 7 \\ v &= 56 \end{aligned}$$

$$5. \begin{aligned} 6z &= 18 \\ z &= 3 \end{aligned}$$

$$10. \begin{aligned} \frac{u}{4} &= 2 \\ u &= 8 \end{aligned}$$

$$15. \begin{aligned} a + 6 &= 7 \\ a &= 1 \end{aligned}$$