

## Simple Linear Equations (A)

Solve for each variable.

1.  $\frac{a}{6} + 4 = 9$

6.  $10 - \frac{a}{5} = 7$

11.  $10 - \frac{x}{6} = 8$

2.  $2 + \frac{14}{x} = 4$

7.  $\frac{a}{8} + 2 = 7$

12.  $\frac{u}{7} + 2 = 4$

3.  $\frac{36}{b} + 1 = 5$

8.  $\frac{35}{u} + 6 = 13$

13.  $\frac{a}{2} + 1 = 10$

4.  $\frac{70}{y} + 3 = 10$

9.  $\frac{40}{a} + 4 = 12$

14.  $\frac{z}{7} + 10 = 18$

5.  $7 + \frac{42}{x} = 13$

10.  $\frac{21}{y} + 3 = 10$

15.  $\frac{b}{3} + 6 = 15$

## Simple Linear Equations (A) Answers

Solve for each variable.

$$1. \frac{a}{6} + 4 = 9$$
$$a = 30$$

$$6. 10 - \frac{a}{5} = 7$$
$$a = 15$$

$$11. 10 - \frac{x}{6} = 8$$
$$x = 12$$

$$2. 2 + \frac{14}{x} = 4$$
$$x = 7$$

$$7. \frac{a}{8} + 2 = 7$$
$$a = 40$$

$$12. \frac{u}{7} + 2 = 4$$
$$u = 14$$

$$3. \frac{36}{b} + 1 = 5$$
$$b = 9$$

$$8. \frac{35}{u} + 6 = 13$$
$$u = 5$$

$$13. \frac{a}{2} + 1 = 10$$
$$a = 18$$

$$4. \frac{70}{y} + 3 = 10$$
$$y = 10$$

$$9. \frac{40}{a} + 4 = 12$$
$$a = 5$$

$$14. \frac{z}{7} + 10 = 18$$
$$z = 56$$

$$5. 7 + \frac{42}{x} = 13$$
$$x = 7$$

$$10. \frac{21}{y} + 3 = 10$$
$$y = 3$$

$$15. \frac{b}{3} + 6 = 15$$
$$b = 27$$

## Simple Linear Equations (B)

Solve for each variable.

1.  $5 + \frac{80}{b} = 13$

6.  $5 + \frac{a}{5} = 13$

11.  $\frac{45}{x} - 2 = 3$

2.  $\frac{6}{a} + 1 = 7$

7.  $2 + \frac{10}{a} = 4$

12.  $8 + \frac{6}{c} = 14$

3.  $\frac{7}{z} - 1 = 6$

8.  $1 + \frac{v}{5} = 9$

13.  $5 + \frac{56}{a} = 13$

4.  $\frac{v}{6} - 2 = 5$

9.  $9 - \frac{v}{8} = 0$

14.  $\frac{c}{8} + 8 = 12$

5.  $8 - \frac{b}{4} = 0$

10.  $\frac{b}{2} - 3 = 6$

15.  $5 + \frac{40}{b} = 13$

## Simple Linear Equations (B) Answers

Solve for each variable.

$$1. 5 + \frac{80}{b} = 13$$
$$b = 10$$

$$6. 5 + \frac{a}{5} = 13$$
$$a = 40$$

$$11. \frac{45}{x} - 2 = 3$$
$$x = 9$$

$$2. \frac{6}{a} + 1 = 7$$
$$a = 1$$

$$7. 2 + \frac{10}{a} = 4$$
$$a = 5$$

$$12. 8 + \frac{6}{c} = 14$$
$$c = 1$$

$$3. \frac{7}{z} - 1 = 6$$
$$z = 1$$

$$8. 1 + \frac{v}{5} = 9$$
$$v = 40$$

$$13. 5 + \frac{56}{a} = 13$$
$$a = 7$$

$$4. \frac{v}{6} - 2 = 5$$
$$v = 42$$

$$9. 9 - \frac{v}{8} = 0$$
$$v = 72$$

$$14. \frac{c}{8} + 8 = 12$$
$$c = 32$$

$$5. 8 - \frac{b}{4} = 0$$
$$b = 32$$

$$10. \frac{b}{2} - 3 = 6$$
$$b = 18$$

$$15. 5 + \frac{40}{b} = 13$$
$$b = 5$$

## Simple Linear Equations (C)

Solve for each variable.

1.  $\frac{a}{2} - 7 = 0$

6.  $\frac{32}{a} + 9 = 13$

11.  $9 + \frac{27}{y} = 12$

2.  $\frac{b}{2} - 5 = 1$

7.  $10 - \frac{y}{4} = 5$

12.  $6 + \frac{30}{u} = 12$

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

8.  $\frac{c}{7} + 10 = 16$

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

4.  $1 + \frac{z}{4} = 3$

9.  $7 + \frac{27}{c} = 16$

14.  $\frac{x}{6} - 7 = 2$

5.  $\frac{63}{u} - 3 = 4$

10.  $\frac{48}{z} + 2 = 10$

15.  $\frac{40}{y} + 3 = 11$

## Simple Linear Equations (C) Answers

Solve for each variable.

$$1. \frac{a}{2} - 7 = 0$$
$$a = 14$$

$$6. \frac{32}{a} + 9 = 13$$
$$a = 8$$

$$11. 9 + \frac{27}{y} = 12$$
$$y = 9$$

$$2. \frac{b}{2} - 5 = 1$$
$$b = 12$$

$$7. 10 - \frac{y}{4} = 5$$
$$y = 20$$

$$12. 6 + \frac{30}{u} = 12$$
$$u = 5$$

$$3. 10 - \frac{v}{7} = 4$$
$$v = 42$$

$$8. \frac{c}{7} + 10 = 16$$
$$c = 42$$

$$13. \frac{3}{a} + 5 = 8$$
$$a = 1$$

$$4. 1 + \frac{z}{4} = 3$$
$$z = 8$$

$$9. 7 + \frac{27}{c} = 16$$
$$c = 3$$

$$14. \frac{x}{6} - 7 = 2$$
$$x = 54$$

$$5. \frac{63}{u} - 3 = 4$$
$$u = 9$$

$$10. \frac{48}{z} + 2 = 10$$
$$z = 6$$

$$15. \frac{40}{y} + 3 = 11$$
$$y = 5$$

## Simple Linear Equations (D)

Solve for each variable.

1.  $5 + \frac{80}{x} = 13$

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

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

2.  $9 + \frac{50}{b} = 14$

7.  $\frac{z}{9} + 2 = 5$

12.  $6 - \frac{y}{5} = 1$

3.  $5 + \frac{u}{7} = 13$

8.  $\frac{90}{x} - 6 = 3$

13.  $6 - \frac{z}{5} = 4$

4.  $2 + \frac{12}{a} = 8$

9.  $\frac{14}{u} - 1 = 1$

14.  $\frac{90}{b} + 7 = 16$

5.  $\frac{y}{2} - 6 = 1$

10.  $1 + \frac{u}{9} = 3$

15.  $2 + \frac{z}{8} = 6$

## Simple Linear Equations (D) Answers

Solve for each variable.

$$1. 5 + \frac{80}{x} = 13$$
$$x = 10$$

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

$$11. \frac{9}{y} - 7 = 2$$
$$y = 1$$

$$2. 9 + \frac{50}{b} = 14$$
$$b = 10$$

$$7. \frac{z}{9} + 2 = 5$$
$$z = 27$$

$$12. 6 - \frac{y}{5} = 1$$
$$y = 25$$

$$3. 5 + \frac{u}{7} = 13$$
$$u = 56$$

$$8. \frac{90}{x} - 6 = 3$$
$$x = 10$$

$$13. 6 - \frac{z}{5} = 4$$
$$z = 10$$

$$4. 2 + \frac{12}{a} = 8$$
$$a = 2$$

$$9. \frac{14}{u} - 1 = 1$$
$$u = 7$$

$$14. \frac{90}{b} + 7 = 16$$
$$b = 10$$

$$5. \frac{y}{2} - 6 = 1$$
$$y = 14$$

$$10. 1 + \frac{u}{9} = 3$$
$$u = 18$$

$$15. 2 + \frac{z}{8} = 6$$
$$z = 32$$

## Simple Linear Equations (E)

Solve for each variable.

1.  $\frac{a}{5} - 6 = 1$

6.  $\frac{27}{v} + 1 = 4$

11.  $9 + \frac{4}{b} = 11$

2.  $4 + \frac{c}{3} = 13$

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

12.  $6 + \frac{25}{z} = 11$

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

8.  $\frac{10}{u} + 8 = 13$

13.  $\frac{14}{b} - 3 = 4$

4.  $7 + \frac{30}{c} = 12$

9.  $\frac{a}{7} - 1 = 6$

14.  $7 + \frac{20}{z} = 12$

5.  $9 + \frac{c}{4} = 15$

10.  $\frac{80}{v} + 7 = 15$

15.  $9 - \frac{y}{3} = 0$

## Simple Linear Equations (E) Answers

Solve for each variable.

$$1. \frac{a}{5} - 6 = 1$$
$$a = 35$$

$$6. \frac{27}{v} + 1 = 4$$
$$v = 9$$

$$11. 9 + \frac{4}{b} = 11$$
$$b = 2$$

$$2. 4 + \frac{c}{3} = 13$$
$$c = 27$$

$$7. \frac{c}{2} + 5 = 13$$
$$c = 16$$

$$12. 6 + \frac{25}{z} = 11$$
$$z = 5$$

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

$$8. \frac{10}{u} + 8 = 13$$
$$u = 2$$

$$13. \frac{14}{b} - 3 = 4$$
$$b = 2$$

$$4. 7 + \frac{30}{c} = 12$$
$$c = 6$$

$$9. \frac{a}{7} - 1 = 6$$
$$a = 49$$

$$14. 7 + \frac{20}{z} = 12$$
$$z = 4$$

$$5. 9 + \frac{c}{4} = 15$$
$$c = 24$$

$$10. \frac{80}{v} + 7 = 15$$
$$v = 10$$

$$15. 9 - \frac{y}{3} = 0$$
$$y = 27$$

## Simple Linear Equations (F)

Solve for each variable.

1.  $\frac{36}{c} - 6 = 0$

6.  $2 + \frac{8}{x} = 6$

11.  $\frac{10}{a} + 5 = 10$

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

7.  $\frac{z}{3} + 7 = 16$

12.  $\frac{4}{y} + 10 = 12$

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

8.  $\frac{72}{z} + 3 = 11$

13.  $\frac{30}{c} - 5 = 0$

4.  $1 + \frac{4}{u} = 5$

9.  $\frac{7}{b} + 8 = 15$

14.  $\frac{24}{y} - 3 = 3$

5.  $\frac{2}{y} + 1 = 3$

10.  $\frac{x}{8} + 6 = 10$

15.  $\frac{v}{5} + 8 = 16$

## Simple Linear Equations (F) Answers

Solve for each variable.

$$1. \frac{36}{c} - 6 = 0$$
$$c = 6$$

$$6. 2 + \frac{8}{x} = 6$$
$$x = 2$$

$$11. \frac{10}{a} + 5 = 10$$
$$a = 2$$

$$2. \frac{y}{4} + 6 = 12$$
$$y = 24$$

$$7. \frac{z}{3} + 7 = 16$$
$$z = 27$$

$$12. \frac{4}{y} + 10 = 12$$
$$y = 2$$

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

$$8. \frac{72}{z} + 3 = 11$$
$$z = 9$$

$$13. \frac{30}{c} - 5 = 0$$
$$c = 6$$

$$4. 1 + \frac{4}{u} = 5$$
$$u = 1$$

$$9. \frac{7}{b} + 8 = 15$$
$$b = 1$$

$$14. \frac{24}{y} - 3 = 3$$
$$y = 4$$

$$5. \frac{2}{y} + 1 = 3$$
$$y = 1$$

$$10. \frac{x}{8} + 6 = 10$$
$$x = 32$$

$$15. \frac{v}{5} + 8 = 16$$
$$v = 40$$

## Simple Linear Equations (G)

Solve for each variable.

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

6.  $4 + \frac{9}{c} = 7$

11.  $2 + \frac{v}{4} = 7$

2.  $8 - \frac{c}{2} = 1$

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

12.  $\frac{56}{v} + 6 = 13$

3.  $\frac{49}{u} + 5 = 12$

8.  $4 + \frac{b}{3} = 8$

13.  $\frac{b}{6} - 3 = 2$

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

9.  $10 + \frac{c}{4} = 13$

14.  $6 + \frac{12}{x} = 9$

5.  $\frac{v}{4} - 9 = 0$

10.  $\frac{27}{a} + 1 = 4$

15.  $7 + \frac{27}{b} = 10$

## Simple Linear Equations (G) Answers

Solve for each variable.

$$1. \frac{y}{6} + 3 = 12$$
$$y = 54$$

$$6. 4 + \frac{9}{c} = 7$$
$$c = 3$$

$$11. 2 + \frac{v}{4} = 7$$
$$v = 20$$

$$2. 8 - \frac{c}{2} = 1$$
$$c = 14$$

$$7. 4 - \frac{x}{4} = 1$$
$$x = 12$$

$$12. \frac{56}{v} + 6 = 13$$
$$v = 8$$

$$3. \frac{49}{u} + 5 = 12$$
$$u = 7$$

$$8. 4 + \frac{b}{3} = 8$$
$$b = 12$$

$$13. \frac{b}{6} - 3 = 2$$
$$b = 30$$

$$4. 7 - \frac{a}{7} = 1$$
$$a = 42$$

$$9. 10 + \frac{c}{4} = 13$$
$$c = 12$$

$$14. 6 + \frac{12}{x} = 9$$
$$x = 4$$

$$5. \frac{v}{4} - 9 = 0$$
$$v = 36$$

$$10. \frac{27}{a} + 1 = 4$$
$$a = 9$$

$$15. 7 + \frac{27}{b} = 10$$
$$b = 9$$

## Simple Linear Equations (H)

Solve for each variable.

1.  $\frac{c}{5} + 8 = 13$

6.  $\frac{30}{y} + 1 = 7$

11.  $1 + \frac{c}{6} = 7$

2.  $5 + \frac{c}{3} = 11$

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

12.  $\frac{16}{u} + 2 = 10$

3.  $\frac{12}{x} + 10 = 16$

8.  $4 + \frac{27}{y} = 7$

13.  $\frac{8}{y} + 9 = 17$

4.  $\frac{27}{v} + 6 = 9$

9.  $\frac{v}{6} - 4 = 2$

14.  $\frac{b}{9} - 5 = 2$

5.  $\frac{c}{3} + 7 = 13$

10.  $\frac{81}{c} + 8 = 17$

15.  $\frac{72}{v} - 6 = 3$

## Simple Linear Equations (H) Answers

Solve for each variable.

$$1. \frac{c}{5} + 8 = 13$$
$$c = 25$$

$$6. \frac{30}{y} + 1 = 7$$
$$y = 5$$

$$11. 1 + \frac{c}{6} = 7$$
$$c = 36$$

$$2. 5 + \frac{c}{3} = 11$$
$$c = 18$$

$$7. \frac{b}{7} + 5 = 8$$
$$b = 21$$

$$12. \frac{16}{u} + 2 = 10$$
$$u = 2$$

$$3. \frac{12}{x} + 10 = 16$$
$$x = 2$$

$$8. 4 + \frac{27}{y} = 7$$
$$y = 9$$

$$13. \frac{8}{y} + 9 = 17$$
$$y = 1$$

$$4. \frac{27}{v} + 6 = 9$$
$$v = 9$$

$$9. \frac{v}{6} - 4 = 2$$
$$v = 36$$

$$14. \frac{b}{9} - 5 = 2$$
$$b = 63$$

$$5. \frac{c}{3} + 7 = 13$$
$$c = 18$$

$$10. \frac{81}{c} + 8 = 17$$
$$c = 9$$

$$15. \frac{72}{v} - 6 = 3$$
$$v = 8$$

## Simple Linear Equations (I)

Solve for each variable.

1.  $\frac{z}{9} + 1 = 6$

6.  $6 - \frac{v}{5} = 3$

11.  $6 - \frac{y}{2} = 1$

2.  $4 + \frac{28}{y} = 11$

7.  $3 + \frac{c}{3} = 8$

12.  $10 + \frac{72}{u} = 19$

3.  $\frac{b}{4} + 9 = 17$

8.  $\frac{x}{2} + 2 = 5$

13.  $\frac{48}{x} + 4 = 10$

4.  $8 + \frac{18}{u} = 14$

9.  $4 + \frac{7}{x} = 11$

14.  $6 + \frac{x}{7} = 15$

5.  $\frac{a}{6} + 2 = 7$

10.  $\frac{y}{4} + 4 = 9$

15.  $\frac{35}{x} + 2 = 9$

## Simple Linear Equations (I) Answers

Solve for each variable.

$$1. \frac{z}{9} + 1 = 6$$
$$z = 45$$

$$6. 6 - \frac{v}{5} = 3$$
$$v = 15$$

$$11. 6 - \frac{y}{2} = 1$$
$$y = 10$$

$$2. 4 + \frac{28}{y} = 11$$
$$y = 4$$

$$7. 3 + \frac{c}{3} = 8$$
$$c = 15$$

$$12. 10 + \frac{72}{u} = 19$$
$$u = 8$$

$$3. \frac{b}{4} + 9 = 17$$
$$b = 32$$

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

$$13. \frac{48}{x} + 4 = 10$$
$$x = 8$$

$$4. 8 + \frac{18}{u} = 14$$
$$u = 3$$

$$9. 4 + \frac{7}{x} = 11$$
$$x = 1$$

$$14. 6 + \frac{x}{7} = 15$$
$$x = 63$$

$$5. \frac{a}{6} + 2 = 7$$
$$a = 30$$

$$10. \frac{y}{4} + 4 = 9$$
$$y = 20$$

$$15. \frac{35}{x} + 2 = 9$$
$$x = 5$$

## Simple Linear Equations (J)

Solve for each variable.

1.  $\frac{x}{5} + 10 = 17$

6.  $7 + \frac{30}{x} = 10$

11.  $7 - \frac{a}{3} = 0$

2.  $\frac{18}{b} + 5 = 14$

7.  $2 + \frac{x}{3} = 8$

12.  $\frac{45}{z} - 3 = 6$

3.  $4 + \frac{v}{9} = 10$

8.  $\frac{y}{2} - 8 = 1$

13.  $\frac{30}{b} + 9 = 15$

4.  $4 + \frac{z}{2} = 6$

9.  $5 + \frac{b}{4} = 7$

14.  $\frac{x}{9} + 10 = 18$

5.  $\frac{b}{6} + 10 = 19$

10.  $\frac{z}{9} - 2 = 4$

15.  $\frac{21}{z} - 2 = 5$

## Simple Linear Equations (J) Answers

Solve for each variable.

$$1. \frac{x}{5} + 10 = 17$$
$$x = 35$$

$$6. 7 + \frac{30}{x} = 10$$
$$x = 10$$

$$11. 7 - \frac{a}{3} = 0$$
$$a = 21$$

$$2. \frac{18}{b} + 5 = 14$$
$$b = 2$$

$$7. 2 + \frac{x}{3} = 8$$
$$x = 18$$

$$12. \frac{45}{z} - 3 = 6$$
$$z = 5$$

$$3. 4 + \frac{v}{9} = 10$$
$$v = 54$$

$$8. \frac{y}{2} - 8 = 1$$
$$y = 18$$

$$13. \frac{30}{b} + 9 = 15$$
$$b = 5$$

$$4. 4 + \frac{z}{2} = 6$$
$$z = 4$$

$$9. 5 + \frac{b}{4} = 7$$
$$b = 8$$

$$14. \frac{x}{9} + 10 = 18$$
$$x = 72$$

$$5. \frac{b}{6} + 10 = 19$$
$$b = 54$$

$$10. \frac{z}{9} - 2 = 4$$
$$z = 54$$

$$15. \frac{21}{z} - 2 = 5$$
$$z = 3$$