

Solving Basic Equations with Multiplication or Division - Set 1

AB-SE2 1

Instructions: Use multiplication or division to solve each equation.

1 $\frac{4x}{4} = \frac{12}{4}$
 $x = 3$

2 $(5) \frac{x}{5} = 7(5)$
 $x = 35$

3 $\frac{x}{3} = 9$

4 $72 = 9x$

5 $12x = 144$

6 $10 = \frac{x}{4}$

7 $\frac{24}{x} = 6$

8 $5x = 105$

9 $\frac{x}{12} = 9$

10 $15 = \frac{75}{x}$

11 $\frac{x}{7} = 22$

12 $2x = 142$

Solving Basic Equations with Multiplication or Division - Set 2

AB-SE2 2

Instructions: Use multiplication or division to solve each equation.

$$\begin{aligned} 1 \quad \frac{40}{8} &= \frac{8x}{8} \\ 5 &= x \\ \text{or } x &= 5 \end{aligned}$$

$$\begin{aligned} 2 \quad (\times) 12 &= \frac{48}{x} (\times) \\ \frac{12x}{12} &= \frac{48}{12} \\ x &= 4 \end{aligned}$$

$$3 \quad \frac{x}{8} = 8$$

$$4 \quad 11x = 66$$

$$5 \quad \frac{32}{x} = 4$$

$$6 \quad \frac{x}{3} = 24$$

$$7 \quad 6x = 78$$

$$8 \quad \frac{x}{4} = 14$$

$$9 \quad 7 = \frac{84}{x}$$

$$10 \quad 65 = 5x$$

$$11 \quad 3x = 135$$

$$12 \quad 3 = \frac{x}{20}$$

Solving Basic Equations (with decimals)

AB-SE2 3

Instructions: Use multiplication or division to solve each equation. You can use a calculator to do the decimal arithmetic if you'd like to.

1 $5.0 = 2.5x$

2 $\frac{x}{2} = 1.6$

3 $1.5 = \frac{0.5}{x}$

4 $0.1x = 2.4$

5 $\frac{x}{2.1} = 1.6$

6 $\frac{3.5}{x} = 2.5$

7 $\frac{x}{3} = 6.4$

8 $0.2x = 0.7$

9 $8 = \frac{8.4}{x}$

10 $2.25 = 0.75x$

Solving Basic Equations (with negative numbers)

AB-SE2 4

Instructions: Use multiplication or division to solve each equation.

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

2 $-3x = -21$

3 $3 = \frac{-12}{x}$

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

5 $\frac{x}{-7} = 9$

6 $15x = -45$

7 $\frac{x}{-8} = -1$

8 $55 = -5x$

9 $-72 = -8x$

10 $9 = \frac{-45}{x}$

Solving Basic Equations - Part 2

1 Solve for x

$$3x = 6$$

2 Solve for x

$$6x = 24$$

3 Solve for x

$$60 = 12x$$

4 Solve for x

$$0.5x = 1$$

5 Solve for x

$$\frac{x}{4} = 3$$

6 Solve for x

$$\frac{x}{8} = 12$$

7 Solve for x

$$15 = \frac{x}{7}$$

8 Solve for x

$$\frac{x}{0.2} = 10$$

9 Solve for x

$$\frac{15}{x} = 3$$

10 Solve for x

$$\frac{10}{x} = 4$$

Solving Basic Equations with Multiplication or Division - Set 1

AB-SE2 1

Instructions: Use multiplication or division to solve each equation.

$$1 \quad \frac{4x}{4} = \frac{12}{4}$$

$$x = 3$$

$$2 \quad (\cancel{5}) \frac{x}{5} = 7(5)$$

$$x = 35$$

$$3 \quad (\cancel{3}) \frac{x}{3} = 9(3)$$

$$x = 27$$

$$4 \quad \frac{72}{9} = \frac{\cancel{9}x}{\cancel{9}}$$

$$8 = x$$

or $x = 8$

$$5 \quad \frac{\cancel{12}x}{\cancel{12}} = \frac{144}{12}$$

$$x = 12$$

$$6 \quad (4)10 = \frac{x}{\cancel{4}}(\cancel{4})$$

$$40 = x$$

or $x = 40$

$$7 \quad (\cancel{x}) \frac{24}{x} = 6(x)$$

$$\frac{24}{6} = \frac{\cancel{6}x}{\cancel{6}}$$

$$4 = x \quad \text{or} \quad x = 4$$

$$8 \quad \frac{\cancel{5}x}{\cancel{5}} = \frac{105}{5}$$

$$x = 21$$

$$9 \quad (\cancel{12}) \frac{x}{12} = 9(12)$$

$$x = 108$$

$$10 \quad (x)15 = \frac{75}{x}(\cancel{x})$$

$$\frac{\cancel{15}x}{\cancel{15}} = \frac{75}{15}$$

$$x = 5$$

$$11 \quad (\cancel{7}) \frac{x}{7} = 22(7)$$

$$x = 154$$

$$12 \quad \frac{\cancel{2}x}{\cancel{2}} = \frac{142}{2}$$

$$x = 71$$

Solving Basic Equations with Multiplication or Division - Set 2

AB-SE2 2

Instructions: Use multiplication or division to solve each equation.

$$\begin{aligned} 1 \quad \frac{40}{8} &= \frac{8x}{8} \\ 5 &= x \\ \text{or } x &= 5 \end{aligned}$$

$$\begin{aligned} 2 \quad (\times) 12 &= \frac{48}{x} (\times) \\ \frac{12x}{12} &= \frac{48}{12} \\ x &= 4 \end{aligned}$$

$$\begin{aligned} 3 \quad (\div) \frac{x}{8} &= 8 (8) \\ x &= 64 \end{aligned}$$

$$\begin{aligned} 4 \quad \frac{11x}{11} &= \frac{66}{11} \\ x &= 6 \end{aligned}$$

$$\begin{aligned} 5 \quad (\times) \frac{32}{x} &= 4 (x) \\ \frac{32}{4} &= \frac{4x}{4} \\ 8 &= x \quad \text{or } x = 8 \end{aligned}$$

$$\begin{aligned} 6 \quad (\div) \frac{x}{3} &= 24 (3) \\ x &= 72 \end{aligned}$$

$$\begin{aligned} 7 \quad \frac{6x}{6} &= \frac{78}{6} \\ x &= 13 \end{aligned}$$

$$\begin{aligned} 8 \quad (\times) \frac{x}{4} &= 14 (4) \\ x &= 56 \end{aligned}$$

$$\begin{aligned} 9 \quad (\times) 7 &= \frac{84}{x} (\times) \\ \frac{7x}{7} &= \frac{84}{7} \\ x &= 12 \end{aligned}$$

$$\begin{aligned} 10 \quad \frac{65}{5} &= \frac{5x}{5} \\ 13 &= x \\ \text{or } x &= 13 \end{aligned}$$

$$\begin{aligned} 11 \quad \frac{3x}{3} &= \frac{135}{3} \\ x &= 45 \end{aligned}$$

$$\begin{aligned} 12 \quad (20) 3 &= \frac{x}{20} (20) \\ 60 &= x \\ \text{or } x &= 60 \end{aligned}$$

Solving Basic Equations (with decimals)

AB-SE2 3

Instructions: Use multiplication or division to solve each equation. You can use a calculator to do the decimal arithmetic if you'd like to.

$$\begin{aligned} 1 \quad \frac{5.0}{2.5} &= \frac{\cancel{2.5}x}{\cancel{2.5}} \\ 2 &= x \\ \text{or } x &= 2 \end{aligned}$$

$$\begin{aligned} 2 \quad (\cancel{2}) \frac{x}{\cancel{2}} &= 1.6 (2) \\ x &= 3.2 \end{aligned}$$

$$\begin{aligned} 3 \quad (\cancel{x}) 1.5 &= \frac{0.5}{\cancel{x}} (\cancel{x}) \\ \frac{\cancel{1.5}x}{\cancel{1.5}} &= \frac{0.5}{1.5} \\ x &= 0.\bar{3} \end{aligned}$$

$$\begin{aligned} 4 \quad \frac{\cancel{0.1}x}{\cancel{0.1}} &= \frac{2.4}{0.1} \\ x &= 24 \end{aligned}$$

$$\begin{aligned} 5 \quad (\cancel{2.1}) \frac{x}{\cancel{2.1}} &= 1.6 (2.1) \\ x &= 3.36 \end{aligned}$$

$$\begin{aligned} 6 \quad (\cancel{x}) \frac{3.5}{\cancel{x}} &= 2.5 (\cancel{x}) \\ \frac{3.5}{2.5} &= \frac{\cancel{2.5}x}{\cancel{2.5}} \\ 1.4 &= x \text{ or } x = 1.4 \end{aligned}$$

$$\begin{aligned} 7 \quad (\cancel{3}) \frac{x}{\cancel{3}} &= 6.4 (3) \\ x &= 19.2 \end{aligned}$$

$$\begin{aligned} 8 \quad \frac{\cancel{0.2}x}{\cancel{0.2}} &= \frac{0.7}{0.2} \\ x &= 3.5 \end{aligned}$$

$$\begin{aligned} 9 \quad (\cancel{x}) 8 &= \frac{8.4}{\cancel{x}} (\cancel{x}) \\ \frac{8x}{\cancel{8}} &= \frac{8.4}{\cancel{8}} \\ x &= 1.05 \end{aligned}$$

$$\begin{aligned} 10 \quad \frac{2.25}{0.75} &= \frac{\cancel{0.75}x}{\cancel{0.75}} \\ 3 &= x \\ \text{or } x &= 3 \end{aligned}$$

Solving Basic Equations (with negative numbers)

AB-SE2 4

Instructions: Use multiplication or division to solve each equation.

1 $(5) \frac{x}{5} = -6 (5)$
 $x = -30$

2 $\frac{-3x}{-3} = \frac{-21}{-3}$
 $x = 7$

3 $(x) 3 = \frac{-12}{x} (x)$
 $\frac{3x}{3} = \frac{-12}{3}$
 $x = -4$

4 $(x) \frac{-28}{x} = -4 (x)$
 $\frac{-28}{-4} = \frac{-4x}{-4}$
 $7 = x$ or $x = 7$

5 $(-7) \frac{x}{-7} = 9 (-7)$
 $x = -63$

6 $\frac{15x}{15} = \frac{-45}{15}$
 $x = -3$

7 $(-8) \frac{x}{-8} = -1 (-8)$
 $x = 8$

8 $\frac{55}{-5} = \frac{-5x}{-5}$
 $-11 = x$
or $x = -11$

9 $\frac{-72}{-8} = \frac{-8x}{-8}$
 $9 = x$
or $x = 9$

10 $(x) 9 = \frac{-45}{x} (x)$
 $\frac{9x}{9} = \frac{-45}{9}$
 $x = -5$

Solving Basic Equations - Part 2

1 Solve for x

$$\frac{3x}{3} = \frac{6}{3}$$

$$x = 2$$

2 Solve for x

$$\frac{6x}{6} = \frac{24}{6}$$

$$x = 4$$

3 Solve for x

$$\frac{60}{12} = \frac{12x}{12}$$

$$5 = x$$

or $x = 5$

4 Solve for x

$$\frac{0.5x}{0.5} = \frac{1}{0.5}$$

$$x = 2$$

5 Solve for x

$$\frac{x}{4} = 3$$

$$x = 12$$

6 Solve for x

$$\frac{x}{8} = 12$$

$$x = 96$$

7 Solve for x

$$15 = \frac{x}{7}$$

$$105 = x$$

or $x = 105$

8 Solve for x

$$\frac{x}{0.2} = 10$$

$$x = 2$$

9 Solve for x

$$\frac{15}{3} = 3(x)$$

$$\frac{15}{3} = \frac{3x}{3}$$

$$5 = x \quad \text{or} \quad x = 5$$

10 Solve for x

$$\frac{10}{4} = 4(x)$$

$$\frac{10}{4} = \frac{4x}{4}$$

$$2.5 = x \quad \text{or} \quad x = 2.5$$