

# Solve algebraic fraction equations

Maths

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# Solve algebraic fraction equations

1. Solve the following equations.

a)  $\frac{x+4}{5}=7$

b)  $\frac{y-7}{3}=12$

c)  $\frac{9r+7}{5}=12$

d)  $\frac{3k-9}{7}=15$

2. Solve the following equations.

a)  $\frac{u+5}{6}=u$

b)  $\frac{t-7}{6}=t+4$

c)  $\frac{6w-9}{3}=3w-7$

d)  $\frac{7p+10}{6}=4(2p-3)$

3. Solve the following equations.

a)  $\frac{e+15}{e}=6$

b)  $\frac{3q-7}{5q}=8$

c)  $\frac{9r-7}{7r}=-8$

d)  $\frac{3t+6}{8t-5}=-12$



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4. Solve the following equations.

a)  $\frac{5}{d+4} = \frac{7}{d-3}$

b)  $\frac{9}{3p+7} = \frac{5}{p-3}$

c)  $\frac{9}{4y-6} = \frac{3}{5y+3}$

d)  $\frac{15}{5r-7} = \frac{12}{7r+4}$

5. Solve the following equations

a)  $\frac{h-3}{4} = \frac{h+6}{7}$

b)  $\frac{t+5}{7} = \frac{2t-4}{5}$

c)  $\frac{3u-5}{8} = \frac{5u}{5}$

d)  $\frac{7e}{12} = \frac{8e-6}{9}$

6. Solve the following equations

a)  $\frac{h+3}{h} = \frac{h}{h+7}$

b)  $\frac{p+6}{p-3} = \frac{p+7}{p-4}$

c)  $\frac{r+5}{3r} = \frac{r+4}{3r-2}$

d)  $\frac{8w-4}{4w+5} = \frac{6w-8}{3w+3}$



# Answers



# Solve algebraic fraction equations

1. Solve the following equations.

a)  $\frac{x+4}{5}=7$   
 $x = 31$

b)  $\frac{y-7}{3}=12$   
 $y = 43$

c)  $\frac{9r+7}{5}=14$   
 $r = 7$

d)  $\frac{3k-9}{7}=15$   
 $k = 38$

2. Solve the following equations.

a)  $\frac{u+5}{6}=u$   
 $u = 1$

b)  $\frac{t-7}{6}=t+4$   
 $t = -\frac{31}{5} = -6.2$

c)  $\frac{6w-9}{3}=3w-7$   
 $w = 4$

d)  $\frac{7p+10}{6}=4(2p-3)$   
 $p = 2$

3. Solve the following equations.

a)  $\frac{e+15}{e}=6$   
 $e = 3$

b)  $\frac{3q-7}{5q}=8$   
 $q = \frac{7}{37}$

c)  $\frac{9r-7}{7r}=-8$   
 $r = \frac{7}{65}$

d)  $\frac{3t+6}{8t-5}=-12$   
 $t = \frac{54}{99}$



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4. Solve the following equations.

$$\text{a) } \frac{5}{d+4} = \frac{7}{d-3}$$
$$d = -\frac{43}{2}$$

$$\text{b) } \frac{9}{3p+7} = \frac{5}{p-3}$$
$$p = -\frac{62}{6}$$

$$\text{c) } \frac{9}{4y-6} = \frac{3}{5y+3}$$
$$y = -\frac{45}{33}$$

$$\text{d) } \frac{15}{5r-7} = \frac{12}{7r+4}$$
$$r = -\frac{144}{45}$$

5. Solve the following equations

$$\text{a) } \frac{h-3}{4} = \frac{h+6}{7}$$
$$h = 15$$

$$\text{b) } \frac{t+5}{7} = \frac{2t-4}{5}$$
$$t = \frac{53}{9}$$

$$\text{c) } \frac{3u-5}{8} = \frac{5u}{5}$$
$$u = -1$$

$$\text{d) } \frac{7e}{12} = \frac{8e-6}{9}$$
$$e = \frac{72}{33}$$

6. Solve the following equations

$$\text{a) } \frac{h+3}{h} = \frac{h}{h+7}$$
$$h = 2.1$$

$$\text{b) } \frac{p+6}{p-3} = \frac{p+7}{p-4}$$
$$p = -1.5$$

$$\text{c) } \frac{r+5}{3r} = \frac{r+4}{3r-2}$$
$$r = 10$$

$$\text{d) } \frac{8w-4}{4w+5} = \frac{6w-8}{3w+3}$$
$$w = -2$$

