



Solving Equations Involving Algebraic Fractions **Home Learning**

1. Simplify:

a. $\frac{3x}{4} \times \frac{2x}{9}$

e. $\frac{1}{4x} - \frac{5}{8x^2}$

b. $\frac{14x}{5x} \times \frac{10x^2}{7}$

f. $\frac{14}{x} \div \frac{7}{x^2}$

c. $\frac{5x}{8} + \frac{x}{4}$

g. $\frac{x+1}{x+2} \times \frac{x-1}{x-2}$

d. $\frac{3}{x} + \frac{2}{x^2}$

h. $\frac{2}{x+4} \div \frac{1}{x^2-16}$

2. Simplify:

a. $\frac{1}{x+5} + \frac{1}{x+3}$

c. $\frac{4x}{x+7} + \frac{x-2}{x-1}$

b. $\frac{3}{x+2} - \frac{1}{x-8}$

d. $\frac{x+4}{3x-1} + \frac{x+8}{2x+9}$

3. Solve:

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

d. $\frac{2x}{3} = 11$

b. $\frac{x}{3} + \frac{2x}{4} = 10$

e. $\frac{x+4}{x} - \frac{x-3}{2} = -1$

c. $\frac{x}{3} - \frac{x-1}{5} = 1$

f. $\frac{x}{x+5} + \frac{12}{x-2} = -6$



Challenge

Can you create an equation, using algebraic fractions, which has a solution of $x = 5$?

