

1) Express as a single fraction

a) $\frac{5x}{8} - \frac{x}{8} = -$

b) $\frac{3x}{10} + \frac{x}{10} = -$

c) $\frac{12x}{13} - \frac{x}{26} = -$

d) $\frac{x}{2} + \frac{x}{8} = -$

e) $\frac{2x}{7} + \frac{x}{5} = -$

f) $\frac{x}{3} + \frac{3x}{11} = -$

g) $\frac{27x}{28} - \frac{7x}{12} = -$

h) $\frac{13x}{20} - \frac{3x}{8} = -$

i) $\frac{x}{8} - \frac{x+2}{3} = -$

j) $\frac{x-3}{6} + \frac{x+8}{7} = -$

2) Express as a single fraction

a) $\frac{7x}{10} + \frac{9x}{10} = -$

b) $\frac{7x}{9} - \frac{x}{9} = -$

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

$$d) \frac{2x}{3} + \frac{2x}{9} = -$$

$$e) \frac{6x}{13} + \frac{x}{7} = -$$

$$f) \frac{2x}{3} - \frac{2x}{5} = -$$

$$g) \frac{3x}{10} + \frac{x}{8} = -$$

$$h) \frac{x}{8} + \frac{3x}{20} = -$$

$$i) \frac{x}{4} + \frac{x+5}{3} = -$$

3) Simplify the following

$$a) \frac{6-36a}{60} = -$$

$$b) \frac{27z-24}{9+3z} = -$$

$$c) \frac{4y+14}{10y+35} = -$$

$$d) \frac{3a^2-6a}{5a-10} = -$$

$$e) \frac{b^2+5b+4}{b+1} = -$$

$$f) \frac{y+1}{y^2+3y+2} = -$$

$$g) \frac{b^2+3b-40}{b-5} = -$$

$$h) \frac{b-9}{b^2-7b-18} = -$$

$$i) \frac{y^2+13y+36}{y^2+9y+20} = -$$

j) $\frac{y^2-14y+48}{y^2-13y+42} = -$

4) Solve the following equations

a) $\frac{x}{2x-3} + \frac{4}{x+1} = 1$ $x =$ or $x =$

b) $\frac{3}{x+3} - \frac{4}{x-3} = \frac{5x}{x^2-9}$ $x =$

c) $\frac{x+2}{2} + \frac{x+4}{3} = 4$ $x =$

d) $\frac{2x-2}{6} - \frac{2x-4}{8} = 9$ $x =$

e) $\frac{4x-4}{8} - \frac{4x-2}{6} = \frac{1}{2}$ $x =$