



Leith Academy National 5 Home Learning



ALGEBRAIC FRACTIONS

NON-CALCULATOR

1) Work out the following.

a) $\frac{2}{x} + \frac{3}{y}$ b) $\frac{a}{4} + \frac{7}{b}$ c) $\frac{9}{m} - \frac{m}{2}$ d) $\frac{2p}{5} + \frac{4}{q}$ e) $\frac{2}{4u} - \frac{3v}{u}$

2) Work out the following.

a) $\frac{7}{a} \times \frac{4}{b}$ b) $\frac{8}{g} \div \frac{h}{3}$ c) $\frac{p}{3} \div \frac{q}{6}$ d) $\frac{3x}{4} \times \frac{x}{6}$ e) $\frac{5}{3v} \div \frac{4v}{2}$

3) Work out the following.

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

4) Fully simplify these fractions.

a) $\frac{(a+3)^2}{(a+2)(a+3)}$ b) $\frac{x^2-16}{3x+12}$ c) $\frac{x^2-2x+15}{x^2-9}$ d) $\frac{x^2+11x+18}{2x^2+5x+3}$