FRACTIONS

Example

Simplify: **a** $\dfrac{3-9}{2^2+4}$ **b** $\dfrac{4\times 5}{7-18\div 2}$

a
$$\frac{3-9}{2^2+4}$$
$$=\frac{-6}{4+4} \quad \{\text{simplify numerator and denominator first}\}$$
$$=-\frac{6}{8}$$
$$=-\frac{3\times 2^{1}}{4\times 2_{1}} \quad \{\text{cancel common factor}\}$$
$$=-\frac{3}{4}$$

b
$$\frac{4\times 5}{7-18\div 2}$$
$$=\frac{20}{7-9}$$
$$=\frac{20}{-2}$$
$$=-\frac{10\times 2^{1}}{2_{1}}$$
$$=-10$$

Simplify:

a $\dfrac{3^2}{4-7}$ **b** $\dfrac{11-3}{16\div 4}$ **c** $\dfrac{3-7}{5+3}$ **d** $\dfrac{7+2}{4\times 3}$

e $\dfrac{8-2\times 5}{4\times 3}$ **f** $\dfrac{7\times 3-5}{2^2}$ **g** $\dfrac{-1+8\div 2}{8-5}$ **h** $\dfrac{3^2-2\times 5}{8-3^2}$

Simplify:

a $\dfrac{4\times -3}{6}$ **b** $\dfrac{-5\times -4}{-10}$ **c** $\dfrac{5\times -8}{4}$ **d** $\dfrac{24}{-3\times -4}$

e $\dfrac{6--12}{-3}$ **f** $\dfrac{3+-9}{-6}$ **g** $\dfrac{5--15}{6-8}$ **h** $\dfrac{-5\times -6}{-11-4}$