N5 - Expressions & Formulae

Worksheet 3

Gold Level

Outcome 1 - Reducing fractions to their simplest form

Express these fractions in their simplest form…

1. $\frac{2x+16}{3x+24}$
2. $\frac{5x-10}{x^2-4}$
3. $\frac{3x+12}{x^2-5x-36}$
4. $\frac{x^2-49}{x^2+10x+21}$

Outcome 2 - Adding & Subtracting

Add or subtract the following fractions…

1. $\frac{6}{(x+3)}+\frac{2}{(x+1)}$
2. $\frac{9}{(x+4)}-\frac{5}{(x+8)}$
3. $\frac{7}{(x+5)}+\frac{4}{(x-7)}$
4. $\frac{3}{(x+2)}-\frac{6}{(x-4)}$

Outcome 3 - Multiplying

Multiply the following fractions…

1. $\frac{c}{3}\times\frac{33}{10c}$
2. $\frac{9}{n}\times\frac{n^2}{45}$
3. $\frac{3}{4a^3}\times\frac{2a}{9}$
4. $\frac{8p^3}{15}\times\frac{3}{p}$

Outcome 4 - Dividing

Divide the following fractions…

1. $\frac{d}{4}\div\frac{9d}{2}$
2. $\frac{v^2}{5}\div\frac{v}{45}$
3. $\frac{8z^3}{9}\div\frac{z}{12}$
4. $\frac{12}{5y^3}\div\frac{8}{y^2}$