Simplify fully $1+\dfrac{x^2+x-6}{(x+4)(x-2)}$

$V=\frac{2}{3}hy^2$

(a) $h=2.6 \quad y=1.5$
Work out the value of V.

(b) $V=35 \quad y=2.5$
Work out the value of h.

(c) Make y the subject of the formula $V=\frac{2}{3}hy^2$

(a) Expand and simplify $(3p-2q)(2p+5q)$

(b) Simplify $(2x^2y^4)^3$

(c) Simplify $(a^4b^{-3})^{-2}$

(d) Simplify $(27p^6)^{\frac{1}{3}}$

Expand

$4(c-3)$

$d(d^2+4)$

Factorise

$3x-2x^2$

Expand and simplify fully $2(w-3)+3(w+5)$

Cups cost x dollars each.
Mugs cost $(x+2)$ dollars each.

(a) Write down an expression, in terms of x, for the total cost of 12 cups and 6 mugs.

(b) The total cost of 12 cups and 6 mugs is 57 dollars.
Work out the cost of 1 cup.

(a) Expand and simplify $(p+7)(p-4)$

(b) Simplify $4x^3y^5 \times 3x^2y$

(c) Simplify $(27q^6)^{\frac{2}{3}}$

(a) Simplify $\dfrac{x^2}{x^2-2x}$

(b) Simplify $\dfrac{2}{2x-1}-\dfrac{1}{x+1}$

(a) Simplify $3c^5d \times c^2d^4$

(b) Simplify $(2x^3y)^4$

(c) Simplify fully $\dfrac{2x-6}{x^2-3x}$

Work out the value of $\dfrac{a(b+1)}{16}$ when $a = 6$ and $b = -9$

(a) Factorise $p^2 + 7p$

(b) Solve $4 - 5x = 2$

(c) Simplify $t^3 \times t^6$

(d) Expand and simplify $3(4y + 5) - 5(2y + 3)$

(a) Expand $3(2t+1)$

(b) Expand and simplify $(x+5)(x-3)$

(c) Factorise $10p - 15q$

(d) Factorise $n^2 + 4n$