

## Algebra

### Expansion and Factorization

Fully factorise:     **a**  $3a + 6$      **b**  $ab - 2bc$

$$\begin{aligned} & 3a + 6 \\ &= 3 \times a + 3 \times 2 \\ &= 3(a + 2) \quad \{\text{HCF is } 3\} \end{aligned}$$

$$\begin{aligned} \textbf{b} \quad & ab - 2bc \\ &= a \times b - 2 \times b \times c \\ &= b(a - 2c) \quad \{\text{HCF is } b\} \end{aligned}$$

complete:

**a**  $2x + 4 =$

**b**  $3a - 12 =$

**c**  $15 - 5p =$

**d**  $18x + 12 =$

**e**  $4x^2 - 8x =$

**f**  $2m + 8m^2 =$

Fully factorise:

**a**  $3a + 3b$

**b**  $8x - 16$

**c**  $3p + 18$

**d**  $28 - 14x$

**e**  $7x - 14$

**f**  $12 + 6x$

**g**  $ac + bc$

**h**  $12y - 6a$

