FACTORISING

MIXED FACTORS

Ref: G226.4S3

A1 Factorise fully: $2xy-8x$	**A2** Factorise fully: $8x+4xy$	**A3** Factorise fully: $9x^2+6xy$	**A4** Factorise fully: $9x^3-36x^2$
B1 Factorise fully: $3xy-6x^2y^2$	**B2** Factorise fully: $8xy^2+4x^2y$	**B3** Factorise fully: $2x^4-4wx$	**B4** Factorise fully: $9x^3-12x^4$
C1 Factorise fully: $x^2y^2+6x^2y$	**C2** Factorise fully: $15x^2y-3xy^3$	**C3** Factorise fully: $12x^3y-15x^2y$	**C4** Factorise fully: $6w^2xy+2wx^2y$
D1 Factorise fully: $5x^4y^2-10x^3y$	**D2** Factorise fully: $6x^3y^4+4wxy^2$	**D3** Factorise fully: $9x^3y-6x^2y^4$	**D4** Factorise fully: $7x^2y^3+x^4y$
E1 Factorise fully: $6y^3-3y^4+9y^2$	**E2** Factorise fully: $4x^3+2x^2y-6x^2$	**E3** Factorise fully: $4x^4y^3-8x^3y^4+6x^2y^4$	**E4** Factorise fully: $9xy^3+6x^2y^2+15x^3y$

FACTORISING

MIXED FACTORS

Ref: G226. **4S3**

A1 Factorise fully: $2xy - 8x = 2x(y-4)$	**A2** Factorise fully: $8x + 4xy = 4x(2+y)$	**A3** Factorise fully: $9x^2 + 6xy = 3x(3x+2y)$	**A4** Factorise fully: $9x^3 - 36x^2 = 9x^2(x-4)$
B1 Factorise fully: $3xy - 6x^2y^2 = 3xy(1-2xy)$	**B2** Factorise fully: $8xy^2 + 4x^2y = 4xy(2y+x)$	**B3** Factorise fully: $2x^4 - 4wx = 2x(x^3-2w)$	**B4** Factorise fully: $9x^3 - 12x^4 = 3x^3(3-4x)$
C1 Factorise fully: $x^2y^2 + 6x^2y = x^2y(y+6)$	**C2** Factorise fully: $15x^2y - 3xy^3 = 3xy(5x-y^2)$	**C3** Factorise fully: $12x^3y - 15x^2y = 3x^2y(4x-5)$	**C4** Factorise fully: $6w^2xy + 2wx^2y$ $= 2wxy(3w+x)$
D1 Factorise fully: $5x^4y^2 - 10x^3y = 5x^3y(xy-2)$	**D2** Factorise fully: $6x^3y^4 + 4wxy^2$ $= 2xy^2(3x^2y^2+2w)$	**D3** Factorise fully: $9x^3y - 6x^2y^4 = 3x^2y(3x-2y^3)$	**D4** Factorise fully: $7x^2y^3 + x^4y = x^2y(7y^2+x^2)$
E1 Factorise fully: $6y^3 - 3y^4 + 9y^2$ $= 3y^2(2y-y^2+3)$	**E2** Factorise fully: $4x^3 + 2x^2y - 6x^2$ $= 2x^2(2x+y-3)$	**E3** Factorise fully: $4x^4y^3 - 8x^3y^4 + 6x^2y^4$ $= 2x^2y^3(2x^2-4xy+3y)$	**E4** Factorise fully: $9xy^3 + 6x^2y^2 + 15x^3y$ $= 3xy(3y^2+2xy+5x^2)$