

Factorisation and Quadratic Equations

- 1) Factorise using common factor, difference of 2 squares, easy table method or the hard table/inspection method.

a) $x^2 - 6x$ b) $2x^2 + 8x$ c) $x^2 - 100$
d) $9x^2 - 25$ e) $x^2 + 3x - 10$ f) $x^2 - 7x - 18$
g) $2x^2 - 5x - 3$ h) $3x^2 - 5x + 2$

- 2) Solve these quadratic equations

a) $3x^2 - 9x = 0$ b) $x^2 - 12x + 20 = 0$
c) $5x^2 + 9x - 2 = 0$ d) $x^2 - 16 = 0$
e) $x^2 = -5x - 6$ f) $x^2 = 5x$
g) $(x-2)(x-3) = 12$

- 3) Solve these quadratic equations to 2 decimal places

a) $2x^2 - 8x + 1 = 0$
b) $3x^2 + 2x - 15 = 0$
c) $2x^2 - 5x - 1 = 0$
d) $x^2 = 6x - 2$