

HA6.1



- 1) Solve using the quadratic formula (and a calculator)
 $3x^2 - 4x - 2 = 0$

- 2) Work out $3.1 \times 10^3 + 2.8 \times 10^2$

- 3) Find the equation of the line perpendicular to $y = 2x + 10$
passing through the point (6,2)

- 4) Expand and simplify $(2x - 3)^2$

- 5) Find the highest common factor of 60 and 84



- 1) Solve simultaneously:
 $2x - y = 10$ and $5x - 3y = 27$

- 2) Simplify $\sqrt{45} - \sqrt{20}$

- 3) $7.5\text{m}^2 = ? \text{cm}^2$

- 4) Work out the value of $5x^2 - 2x$ when $x = -2$

- 5) Solve by factorising $9x^2 + 18x + 8 = 0$



- 1) Solve using the quadratic formula (and a calculator)
 $4x^2 + 5x - 3 = 0$

- 2) Work out $1.3 \times 10^3 \times 1.3 \times 10^2$

- 3) Find the equation of the line perpendicular to $y = -\frac{1}{2}x + 7$
passing through the point (5,2)

- 4) Expand and simplify $(3x - 5)^2$

- 5) Find the lowest common multiple of 60 and 84

HA6.4



- 1) Solve simultaneously:
 $2x - y = 10$ and $5x + 3y = 3$

- 2) Simplify $\sqrt{5} \times \sqrt{60}$

- 3) ? $\text{m}^2 = 500 \text{ cm}^2$

- 4) Work out the value of $2x^3 + 3x$ when $x = -2$

- 5) Solve by factorising $6x^2 + 17x + 5 = 0$



- 1) Solve using the quadratic formula (and a calculator)
 $3x^2 - 5x - 1 = 0$

- 2) Work out $5.4 \times 10^3 + 2.6 \times 10^4$

- 3) Find the equation of the line perpendicular to $y = -3x + 7$
passing through the point $(9, 6)$

- 4) Expand and simplify $(5x - 6)^2$

- 5) Find the highest common factor of 60 and 84



- 1) Solve simultaneously:
 $2x - 2y = 22$ and $3x + 6y = -12$

- 2) Simplify $\sqrt{7} \times \sqrt{14}$

- 3) ? $\text{m}^3 = 500 \text{ cm}^3$

- 4) Work out the value of $3x^3 - x^2$ when $x = -2$

- 5) Solve by factorising $6x^2 - 13x - 15 = 0$