

## HA3.1

1) Solve the inequality  $4x - 6 \leq 2x + 3$



2) Expand and simplify  $3(2x + 3) + 4(6 - 3x)$

3) Work out  $5\frac{2}{7} - 1\frac{3}{4}$

4) Work out  $3.6 \times 4.6$

5) Work out  $2802 \div 0.6$

HA3.2



1) Simplify  $\sqrt{75} + 3\sqrt{12}$

2) Simplify  $(2xy^2)^3$

3) Complete  $4.5\text{cm}^2 = \dots\dots\text{mm}^2$

4) Make x the subject of  $y = \sqrt{\frac{x+a}{b}}$

5) Calculate the area of a semi-circle with diameter 12cm. Leave your answer in terms of  $\pi$

### HA3.3

1) Solve the inequality  $3x - 5 > 5x + 7$



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

3) Work out  $2\frac{2}{3} \div 1\frac{3}{5}$

4) Work out  $0.28 \times 3.9$

5) Work out  $47.67 \div 0.7$

## HA3.4

1) Simplify  $2\sqrt{75} + \sqrt{8} + \sqrt{27} - 3\sqrt{12}$



2) Simplify  $a^4 \times a^2 \times b^3 \div a$

3) Complete  $65\text{cm}^2 = \dots \text{m}^2$

4) Make x the subject of  $9 + ax = 3x - b$

5) Calculate the area of a semi-circle with diameter 5cm. Leave your answer in terms of  $\pi$

HA3.5



- 1) Solve the inequality  $7x + 5 \geq 5x - 7$   
and show the solution on a number line
  
  - 2) Expand and simplify  $3(2a - b) + 3(4b - 3a)$
  
  - 3) Work out  $4\frac{1}{6} \div 2\frac{3}{5}$
  
  - 4) Work out  $0.34 \times 3.5$
  
  - 5) Work out  $2.07 \div 0.6$

## HA3.6



1) Simplify  $\sqrt{20} + 2\sqrt{45} + \sqrt{50} + \sqrt{80}$

2) Simplify  $a^5 \times a^3 \times b^2 \div a^2$

3) Complete  $65\text{cm}^2 = \dots\dots\dots\text{mm}^2$

4) Make  $x$  the subject of  $ax = xy + b$

5) Calculate the area of a semi-circle with diameter 10cm. Leave your answer in terms of  $\pi$