HA5.1

1) Solve, by completing the square
$x^2 - 8x + 7 = 0$

2) Simplify $\frac{x^2-9x+20}{x-4}$

3) Work out $3\frac{1}{2} \times 1\frac{3}{4}$

4) Solve $-3 < 2x + 7 \leq 15$

5) Expand and simplify $(3x - 7)(5x - 3)$

HA5.2

1) Work out $5.64 \div 0.3$

2) Find the gradient of the line joining $(1,4)$ and $(5,16)$

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

4) Evaluate 9^{-2} and $9^{\frac{1}{2}}$

5) Solve simultaneously $3x + 2y = 19$ and $5x - 2y = 21$

HA5.3

1) Solve, by completing the square
$x^2 + 10x + 24 = 0$

2) Simplify $\frac{x^2-16}{x+4}$

3) Work out $6\frac{1}{3} - 3\frac{3}{7}$

4) Solve $-13 < 4x - 5 \leq -1$ and display the solution on a number line

5) Expand and simplify $(6x - 5)(3x + 2)$

HA5.4

1) Work out $74.1 \div 0.03$

2) Find the gradient of the line joining $(11,4)$ and $(2,5)$

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

4) Evaluate $16^{-\frac{1}{2}}$

5) Solve simultaneously $3x + 4y = 14$ and $4x - y = 25$

HA5.5

1) Solve, by completing the square
$x^2 - 14x + 40 = 0$

2) Simplify $\frac{x^2+2x-15}{x^2-9}$

3) Work out $4\frac{1}{3} \div 2\frac{8}{9}$

4) Solve $-4 \leq 5x + 6 < 6$ and display the solution on a number line

5) Expand and simplify $(7x - 4)(2x + 2)$

HA5.6

1) Work out $18.205 \div 0.05$

2) Find the gradient of the line joining $(-7, 3)$ and $(-5, -6)$

3) Make x the subject of $y^2 - 5x = ax + b$

4) Evaluate $64^{\frac{2}{3}}$

5) Solve simultaneously $3x + 3y = 3$ and $2x - 6y = -30$