HAA3.1

1) Simplify $2\sqrt{3} \times 4\sqrt{75}$

2) Find the nth term of $\frac{3}{7}, \frac{4}{9}, \frac{5}{11}, \frac{6}{13}$

3) Solve $sin\, x = 0.5$ for $0° \leq x < 360°$

4) Find the inverse function of $f(x) = 3x + 2$

5) Find the next term in the sequence 2, 6, 18, 54, …

HAA 3.2

1) Find the equation of the line passing through (3 , 4) and (5 , 10)

2) Solve using the quadratic formula (and a calculator), $3x^2 + 5x - 7 = 0$

3) Factorise $6x^2 + 23x + 20$

4) Simplify $\frac{2x}{5} + \frac{3x-4}{6}$

5) Write down the first three terms of the sequence defined by: $x_1 = 2$, $x_{n+1} = 5x_n + 2$

HAA3.3

1) Simplify $4\sqrt{7} \times 3\sqrt{7}$

2) Find the nth term of $\frac{3}{4}, \frac{5}{9}, \frac{7}{16}, \frac{9}{25}$

3) Solve $cos\, x = 0.5$ for $0° \leq x < 360°$

4) Find the inverse function of $f(x) = \frac{x+3}{4} - 5$

5) Find the next term in the sequence 6, 3, $\frac{3}{2}$, $\frac{3}{4}$, …

HAA 3.4

1) Find the equation of the line passing through (3 , 4) and (1 , 3)

2) Solve using the quadratic formula (and a calculator), $4x^2 - 5x - 9 = 0$

3) Factorise $8x^2 - 10x - 18$

4) Simplify $\frac{3x+1}{4} - \frac{2x-5}{6}$

5) Write down the first three terms of the sequence defined by: $x_1 = 5$, $x_{n+1} = -3x_n + 2$

HAA3.5

1) Simplify $2\sqrt{45} \times 3\sqrt{20}$

2) Find the nth term of $\frac{7}{1}, \frac{5}{8}, \frac{3}{27}, \frac{1}{64}$

3) Solve $tan(x) = \sqrt{3}$ for $0° \leq x < 360°$

4) Find the inverse function of $f(x) = 4 - \frac{x}{3}$

5) Find the next term in the sequence $\frac{4}{3}$, 4, 12, 36, , …

HAA 3.6

1) Find the equation of the line passing through (4 , 7) and (1 , 13)

2) Solve using the quadratic formula (and a calculator), $3.2x^2 - 2.8x - 7.3 = 0$

3) Factorise $6x^2 - x - 15$

4) Simplify $\frac{3x+2}{3} - \frac{4-3x}{5}$

5) Write down the first three terms of the sequence defined by: $x_1 = 2$, $x_{n+1} = 2x_n + 1$