FAA1.1

1) Express 603000 in standard form



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

3) Work out 3.8^2

4) Round 38492 correct to 2 significant figures

5) What is the gradient of y = -2x + 3



FAA1.2

1) Round 6.148 km to the nearest 10 m



2) Sales rise from 800 per week to 920 per week. Calculate the percentage change

3) If 7 pens cost £3.15, how much would 10 pens cost?

4) Solve the equation 7x + 6 = 3x - 2

5) What is the exact value of cos 45°?

FAA2.1

1) Express 0.000307 in standard form



2) Expand and simplify (x + 7)(x + 3)

3) Factorise 42x - 24

4) Work out $3900 \div 12$

5) Increase £360 by 15%

FAA2.2

 A mass is stated as 70g correct to the nearest 10g. What is the lower bound?



- 2) Find the next two terms in the sequence 8, 4, 2, 1, ...
- 3) Find the y-intercept of the line 2y = 4x + 6



4) Solve simultaneously x + y = 52x + 4y = 14

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

FAA3.1

1) Simplify $x^8 \div x^2$



2) Expand and simplify (x - 7)(x - 3)

3) Factorise $x^2 + 5x - 24$

4) Solve simultaneously 5x - y = 17 and 2x + y = 11

5) If it takes 6 hours for 2 workers to paint a fence, how long would it take 3 workers?

FAA3.2

 A measure is given as 65m to the nearest 5m. What is the upper bound?



2) Work out
$$\frac{3}{4} \div \frac{2}{7}$$
 giving your answer as a mixed number

3) Round 0.030487 to 2 significant figures

4) Does the point (2, 6) lie on the line y = 5x - 4?

5) State the exact value of cos 45°

FAA4_1

1) Work out $3.6 \times 10^3 - 2.8 \times 10^2$



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

3) Factorise $x^2 - 8x + 12$

4) An antique is sold for £360 making a profit of 20%. What was the original price of the antique?

5) Work out
$$\frac{7}{8} + \frac{5}{12}$$
 giving your answer as a mixed number

FAA4.2

1) Express as an inequality, the error interval when t is given as 60 to one significant figure.



2) Solve $2x^2 + 3x = 0$

3) The price of an item increased from £24 to £30. Calculate the percentage change.

4) A car travels 48km in 1 hour 20 minutes.Calculate the average speed.

5) Sketch the graph of $y = x^2 + 1$



FAA5.1

1) Work out $3.6 \times 10^2 \times 2 \times 10^3$



2) Factorise $x^2 - x - 12$

3) Find the gradient of the line through (2,7) and (4,13)

4) Round 0.30496 correct to 2 decimal places

5) Work out 24 ÷ 0.5

FAA5.2

 Express as an inequality, the error interval when x is given as 120 to 2 significant figures



2) Solve simultaneously 2x + y = 0 and 3x + 2y = 3

3) Find the 30th term of the sequence -3, 3, 9, 15, ...

A block of density of 20g/cm³ has a mass of 10g.
Calculate its volume

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

FAA6.1

1) Work out $(6 \times 10^6) \div (3 \times 10^2)$



2) Factorise $x^2 - 16$

3) Find the equation of the straight line passing through the points (0,3) and (2,9)

4) If it takes 3 workers 6 hours to complete a task, how many hours would it take 4 workers?

5) Work out 0.8 ÷ 0.02

FAA6.2

1) Factorise $x^2 - 9x + 18$



- 2) Truncate 23.085 correct to 1 decimal place
- 3) Work out $2\frac{1}{3} \div \frac{3}{5}$

4) State the exact value of $\sin 30^{\circ}$

5) Solve simultaneously 2x + y = 5 and 3x - 2y = 18