

FAA1.1



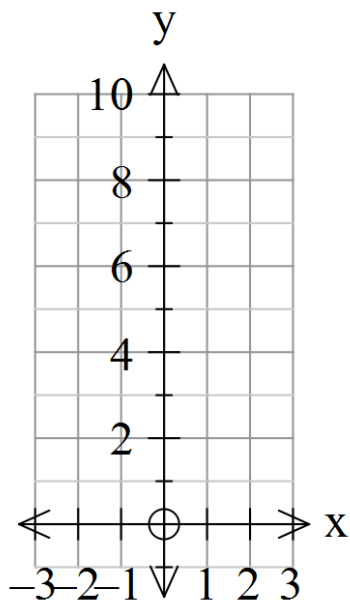
1) Express 603000 in standard form

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  $y = -2x + 3$





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%

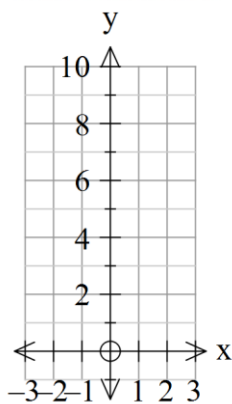
FAA2.2



1) 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

$$x + y = 5$$

$$2x + 4y = 14$$

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?

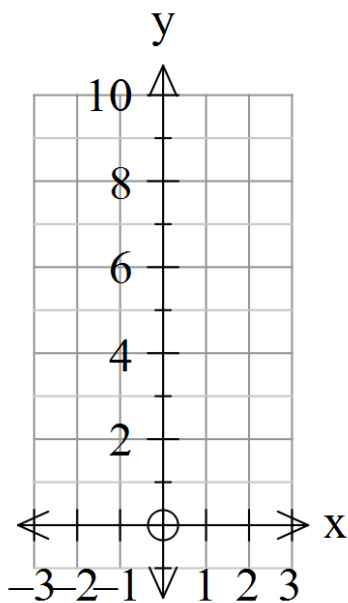




FAA4.2



- 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  $y = x^2 + 1$







FAA5.2



- 1) 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 30<sup>th</sup> term of the sequence -3, 3, 9, 15, ...
  
- 4) A block of density of  $20\text{g/cm}^3$  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  $0.8 \div 0.02$

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  $3x - 2y = 18$