

FAA1.3



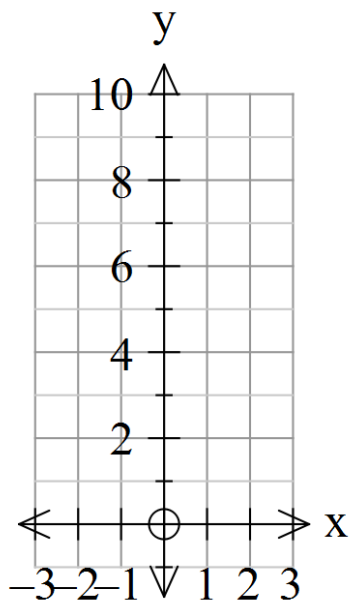
1) Express 340500 in standard form

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

3) Work out  $4.6 \times 28$

4) Round 4567 correct to 2 significant figures

5) What is the gradient of  $y = 3x - 1$

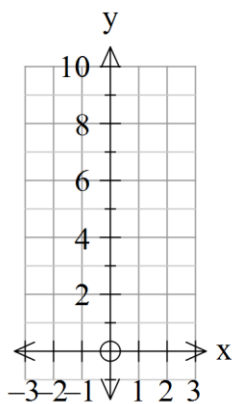








- 1) A length is stated as 3200m correct to the nearest 100m.  
What is the lower bound?
  
  
  
  
  
  
  
  
  
  
- 2) Find the next two terms in the sequence 3, 6, 11, 18, 27,
  
  
  
  
  
  
  
  
  
  
- 3) Find the y-intercept of the line  $3y = 12x + 6$



- 4) Solve simultaneously  
 $x + y = 7$   
 $3x - 2y = 11$

- 5) Work out  $\frac{5}{6} + \frac{3}{4}$

FAA3.3



- 1) Simplify  $6x^8 \div 2x^2$
  
- 2) Expand and simplify  $(x - 8)(x - 4)$
  
- 3) Factorise  $x^2 + 13x + 40$
  
- 4) Solve simultaneously  
 $3x + 2y = 23$  and  $4x + 3y = 32$
  
- 5) If it takes 6 days for 4 workers to build a garage, how long would it take 3 workers?

FAA3.4



- 1) A measure is given as 6km to the nearest 500m.  
What is the lower bound?
  
  
  
  
  
  
  
  
  
  
- 2) Work out  $\frac{4}{5} \div \frac{3}{11}$  giving your answer as a mixed number
  
  
  
  
  
  
  
  
  
  
- 3) Round 491 to 1 significant figure
  
  
  
  
  
  
  
  
  
  
- 4) Does the point ( 3 , 6 ) lie on the line  $y = 3x - 4$  ?
  
  
  
  
  
  
  
  
  
  
- 5) State the exact value of  $\sin 30^\circ$

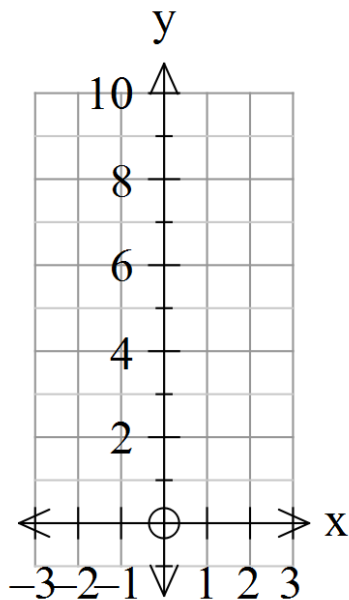
FAA4.3



- 1) Work out  $5.3 \times 10^3 + 6.8 \times 10^4$
  
  
  
  
  
  
  
  
  
  
- 2) Expand and simplify  $(x + 7)(x + 3)$
  
  
  
  
  
  
  
  
  
  
- 3) Factorise  $x^2 + 7x + 12$
  
  
  
  
  
  
  
  
  
  
- 4) A car is sold for £3600 making a loss of 10%. What was the original price of the car?
  
  
  
  
  
  
  
  
  
  
- 5) Work out  $\frac{3}{4} \div \frac{2}{5}$  giving your answer as a mixed number



- 1) Express as an inequality, the error interval when  $p$  is given as 3.8 to one decimal place.
  
- 2) Solve  $5x^2 - 10x = 0$
  
- 3) The price of an item decreased from £40 to £28. Calculate the percentage change.
  
- 4) A car travels at 60km/hr for 1 hour 50 minutes. Calculate the distance travelled.
  
- 5) Sketch the graph of  $y = x^2$





FAA5.3



1) Work out  $(3.6 \times 10^5) \div (2 \times 10^3)$

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

3) Find the gradient of the line through  $(12,7)$  and  $(14,1)$

4) Truncate 4596 correct to 2 significant figures

5) Work out  $360 \div 0.02$

FAA5.4



- 1) Express as an inequality, the error interval when  $x$  is given as 120 to the nearest integer
  
- 2) Solve simultaneously  $3x + 2y = 19$  and  $2x + 7y = 24$
  
- 3) Find the 50<sup>th</sup> term of the sequence 7, 16, 25, 34, ...
  
- 4) A block of volume of  $20\text{cm}^3$  has a mass of 5g.  
Calculate its density in  $\text{g/cm}^3$
  
- 5) Work out  $2\frac{2}{3} \div \frac{3}{4}$



- 1) Work out  $(5 \times 10^4) \times (3 \times 10^2)$ ,  
giving your answer in standard form
  
- 2) Factorise  $x^2 - 100$
  
- 3) Find the equation of the straight line passing through the points  
 $(0, -3)$  and  $(1, 0)$
  
- 4) If 210g of flour are needed to make 12 cakes, how much flour will  
be needed for 15 cakes?
  
- 5) Factorise  $x^2 - 9x + 20$

FAA6.4



- 1) Work out  $\frac{0.03 \times 1.2}{0.02}$
  
- 2) **Truncate** 17.352 correct to 1 decimal place
  
- 3) Work out  $2\frac{1}{3} + 2\frac{4}{5}$
  
- 4) State the exact value of  $\tan 30^\circ$
  
- 5) Solve simultaneously  $3x + 3y = 24$  and  $x + 2y = 11$