1) Simplify $\sqrt{405}$

2) A car bought for £22000 depreciates in value by 4.3% each year. Write down a formula for the value of the car, V, after t years.

3) Use the formula $s = \frac{1}{2}(u + v)t$ to find the distance travelled in 10 seconds if the initial velocity was 5m/s, and the final velocity was 12m/s.

4) Evaluate $16^{\frac{3}{4}}$ (i.e 16 to the power of ¾)

5) A block has a mass of 300g and a density of 75g/cm³. Calculate the volume.

1) Find the nth term of the quadratic sequence 6, 18, 38, 66, …

2) Sketch the curve $y = \sin x$

3) Find the equation of the line with gradient 3 passing through the point (5, 10)

4) Work out $2.4 \times 10^3 + 4.1 \times 10^4$

5) Express $x^2 - 8x + 30$ in completed square form

1) Simplify $\sqrt{112}$

2) £5000 is invested with an interest rate of 2.3% per annum. Write a formula for the value of the investment V, after t years

3) Use the formula $s = \frac{1}{2}(u + v)t$ to find the final velocity when the initial velocity was 12m/s, and it took 3 seconds to travel 48m

4) Evaluate $16^{\frac{3}{2}}$ (i.e 16 to the power of $\frac{3}{2}$)

5) A block has a volume of 10cm³ and a density of 75g/cm³. Calculate the mass.

1) Find the nth term of the quadratic sequence 8, 17, 32, 53, …

2) Sketch the curve $y = \cos x$

3) Find the equation of the line with gradient -2 passing through the point (6 , 3)

4) Work out $5 \times 10^4 + 8.5 \times 10^3$

5) Express $x^2 + 12x - 30$ in completed square form

1) Simplify $\sqrt{98}$

2) A car bought for £23,500 depreciates in value by 7.5% per annum. Write a formula for the value of the car V, after t years

3) Use the formula $s = \frac{1}{2}(u + v)t$ to find how long it took to travel 45m if the initial velocity was 8m/s and the final velocity was 10m/s

4) Evaluate $9^{\frac{5}{2}}$ (i.e 9 to the power of $\frac{5}{2}$)

5) A block has a volume of 4 m³ and a mass of 32kg. Calculate the density.

1) Find the nth term of the quadratic sequence 6, 22, 48, 84, …

2) Sketch the curve $y = x^3$

3) Find the equation of the line with gradient $-\frac{1}{2}$ passing through the point (3 , 5)

4) Work out $3.5 \times 10^4 + 5 \times 10^3$

5) Express $x^2 - 12x - 30$ in completed square form