


MON	TUE	WED	THU	FRI	WEEKEND
10/4 Calculate $\sqrt[5]{19}$ to 1 dp	11/4 £1 = \$1.63 How many pounds would you get for \$130?	12/4 What is the volume of a cuboid with side lengths 5.3cm, 9.7cm and 12.2cm?	13/4 Olivia has a wage rise of 2.5%. Her salary is now £34,850, what was it before?	14/4 Calculate the perimeter (to 1dp) of a semi-circle if $r = 7\text{cm}$	The cost of hiring a car is given by, Cost (£) = No. of days $\times 14.50 + 27.75$ Rob has £125, for how many days can he hire the car?
17/4 Alex and Beth share money in the ratio 3:5, Alex receives £37 less than Beth. How much was originally shared?	18/4 Calculate the area (to 1dp) of a semi-circle if $d = 10\text{cm}$	19/4 The mean no. of goals scored in 12 games is 3.75, after 20 games the mean is 3.85. What is the mean of the last 8?	20/4 How many sides does a polygon have with exterior angles of 12° ?	21/4 Calculate to 2dp $\frac{23.54 \times 2.3^4}{19.2 - 11.32}$	Find the length (to 1 dp) of the hypotenuse of a right-angled triangle with side lengths 8.2cm and 5.6cm.
24/4 Calculate the height of a trapezium given the base is 8.2cm, the opposite parallel side is 12.6cm, and the area 156cm^2	25/4 Calculate the area of an equilateral triangle with side length 7m	26/4 Calculate $\sqrt[3]{(3.92 - 1.2^2)}$ to 3sf	27/4 P is directly proportional to the square of Q. If $P = 12$ when $Q = 6$. Calculate P when Q is 27	28/4 If 5 miles = 8km What is 12 km/h in miles per hour?	David puts £300 into a savings account paying 3.2% compound interest per annum. How much is in his account after 4 years?
01/5 What is the side length of a cube with a volume of 118mm^3 ?	02/5 A 450g tub of yogurt contains 13g of sugar. How much sugar is in a 80g tub?	03/5 A triangle $\triangle ABC$ with sides AB 1.3m, BC 1.6m, and angle $\angle BAC 42^\circ$ Find the angle $\angle ACB$	04/5 Solve the equation $2x^2 + 3x - 7 = 2$	05/5 Calculate a_4 if $a_0 = 2$ and $a_{n+1} = 1.4a_n + 1.3$	Find the perimeter of a right-angled triangle $\triangle ABC$ with hypotenuse AB 10.2cm, and angle $\angle BAC 50^\circ$
08/5 $f(x) = x^2 - \sqrt[3]{x}$ Calculate $f(4.2)$ to 2dp	09/5 What is the volume of a cone with height 12cm and radius 3cm?	10/5 What is the diameter of a circle (to 3sf) with area of 12cm^2 ?	11/5 A bookshelf exerts a force of 150 Newtons on the floor. The pressure on the floor is 120N/m^2 . What is the area in contact with the floor?	12/5 A triangle $\triangle PQR$ with sides PQ 11cm, QR 6cm, and included angle 35° Find the length of PR.	Sarah drove from home to Edinburgh, taking 4 hours at an average speed of 87.5km/h. On her return journey (along the same roads) she reduced her time by 15 min. Calculate her average speed home.
15/5 What is the volume of a cylinder with height 6m & diameter 3m?	16/5 Calculate $4\sqrt{(2.6 + \tan 64^\circ)}$ to 3sf	17/5 What is the surface area of a cuboid with side lengths of 5.1cm, 4.3cm and 7.2cm?	18/5 What is the value of the 15 th term in the sequence given by $3n^2 - 2n + 5$?	19/5 What is the length of the shortest arc created between the hands of a clock, of radius 12cm, at 5pm?	A bag contains blue, red, and green marbles. $P(\text{red})=0.15$, and $P(\text{blue})=0.45$. A marble is picked and replaced twice, what is the probability they are the same colour?
22/5 What is the mass of the cylinder in the question above, if its density is 1.8kg/m^3 ?	23/5 A dress is reduced in a sale by 25%, then the price is increased by 10%. If the final price is £64.35, what was the original?	24/5 What is the area of the sector created in the 19/5 question?	25/5 Paper 1 Non- Calc	26/5 A is directly proportional to the square root of B. If $A = 10$ when $B = 1600$. Calculate B when A is 8.	What is the length of the diagonal of a cuboid with side lengths 5.3cm, 9.7cm and 12.2cm?
29/5 A triangle $\triangle PQR$ with sides PQ 8cm, QR 6cm, and PR 3cm. Find the angle $\angle PRQ$ (to 3sf)	30/5 Find the positive y coordinate when $x=7$ on a circle of radius 12, centred on the origin. Give your answer to 3sf.	31/5 If $x_0 = 1.8$ and $x_{n+1} = 1.4x_n^2 - 0.2x_n$ Calculate x_2 and x_3	01/6 What is the surface area of a sphere of radius 1.2m	02/6 $f(x) = x^2 - 2x$ $g(x) = \sqrt[3]{x}$ Calculate $gf(-5)$	Harry puts £12,000 in an account with 2.4% interest p.a. How many years before he has over £13,500?
05/6 y is inversely proportional to the cube of x. Given that $x=2$ when $y=4$, find the value of y (to 3sf) when $x=6$	06/6 A triangle has area 14m^2 , sides of length 8m and 5m What is the size of the included angle to 1dp?	07/6 A circular lawn with a border of 22m is to be re-turfed at a cost of £2.35 per m^2 . How much will it cost?	08/6 Paper 2 Calculator	09/6 100g of liquid A of density 1.2g/cm^3 and 120g of liquid B of density 1.8g/cm^3 are mixed. What is the density of this liquid?	The volume of a square based pyramid, J, is 25% smaller than the volume of another, K. If K has height 45m and base length 40m, what is the volume of J?
12/6 What is the surface area of a hemisphere of diameter 2.8m	13/6 Paper 3 Calculator	PREPARE FOR THE CALCULATOR PAPERS, ONE DAY AT A TIME...			 <p>Make sure you use your calculator for each question!</p>

MON	TUE	WED	THUR	FRI	WEEKEND	
^{10/4} 1.8 (to 1 dp)	^{11/4} £79.75	^{12/4} 627.202cm ³	^{13/4} £34,000	^{14/4} 36.0cm	6 days	
^{17/4} £148	^{18/4} 39.3cm ²	^{19/4} 4	^{20/4} 30	^{21/4} 83.60	9.9cm	
^{24/4} 15cm	^{25/4} 21.2cm ² (to 1dp)	^{26/4} 1.35	^{27/4} 243	^{28/4} 7.5mph	£340.28	
^{01/5} 4.9mm (to 1dp)	^{02/5} 2.31g (to 2dp)	^{03/5} 32.9° (to 1dp)	^{04/5} x = -3 or 1.5	^{05/5} 16.9 (to 1dp)	24.6cm (to 1dp)	
^{08/5} 16.03	^{09/5} 113.1cm ³	^{10/5} 3.91cm	^{11/5} 1.25m ²	^{12/5} 6.99cm (to 2dp)	93.3km/h (to 1dp)	
^{15/5} 42.4cm ³ (1dp)	^{16/5} 1.47	^{17/5} 179.22cm ²	^{18/5} 650	^{19/5} 31.4cm (to 1dp)	0.385	
^{22/5} 76.4kg (1dp)	^{23/5} £78	^{24/5} 188.5cm ² (to 1dp)	^{25/5} Paper 1 Non- Calc	^{26/5} 1024	16.5cm (to 1dp)	
^{29/5} 122°	^{30/5} 9.75	^{31/5} x ₂ = 23.6 x ₃ = 773.7 (to 1dp)	^{01/6} 18.1m ² (to 1dp)	^{02/6} 3.27 (to 2dp)	5 years	
^{05/6} 0.148	^{06/6} 44.4°	^{07/6} £90.51	^{08/6} Paper 2 Calculator	^{09/6} 1.47g/cm ³	18000m ³	
^{12/6} 18.5m ² (1dp)	^{13/6} Paper 3 Calculator	ANSWERS....				