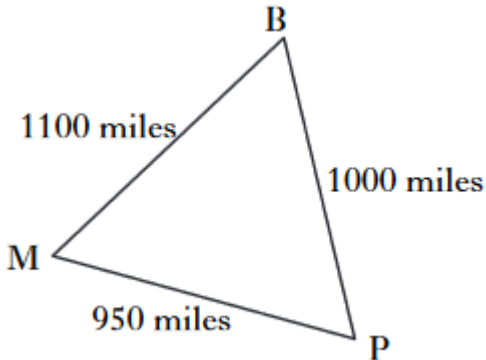
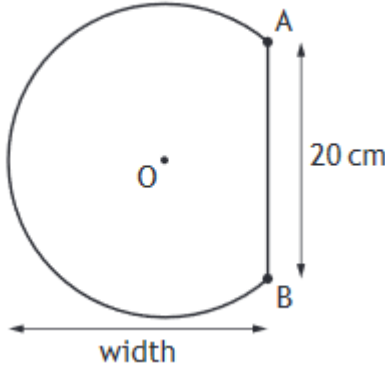
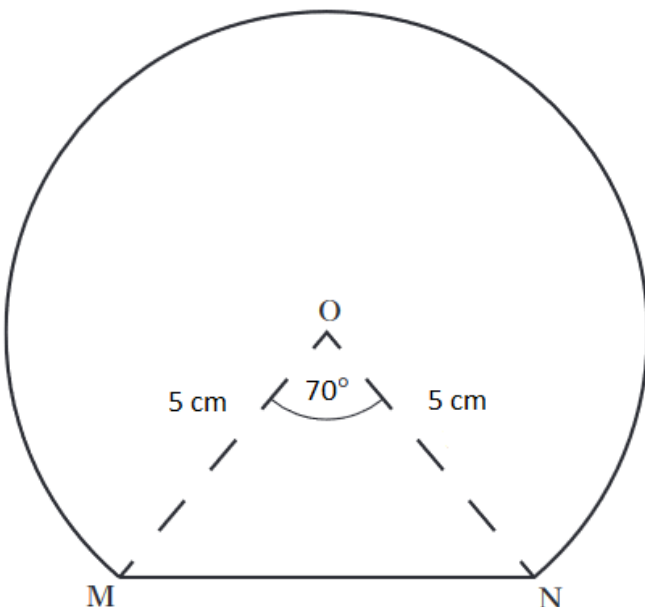


A2	Calculator Paper	
1	<p>Dylan's annual salary is £28 400.</p> <p>He expects his salary to increase steadily by 2.3% per anum.</p> <p>What will Dylan's salary be after 3 years.</p> <p>Give your answer to the nearest pound.</p>	3
2	<p>A rugby team scored the following points in a series of seven matches</p> <p style="text-align: center;">13, 7, 0, 9, 7, 8, 5</p> <p>(a) Calculate the mean and standard deviation for this data sample.</p> <p>The team appoint a new coach and their next season produces a mean of 16 points and a standard deviation of 3.25.</p> <p>(b) Make two comparisons about the performance of the team under the new coach.</p>	4 2
3	 <p style="text-align: right;">Calculate the size of angle BPM</p>	3
4	Change the subject of the formula $r = ax^2 + c$ to x	3
5	Solving the equation $5 \sin x + 1 = 3$, for $0 \leq x \leq 360$	3
6	<p>A cube of wax with a side of 7 centimetres is melted down.</p> <p>This wax is used to make a cone with a radius of 5 centimetres.</p> <p>Calculate the height of this cone.</p> <p>Give your answer correct to 2 significant figures.</p>	3

7	<p>The shape shown is part of a circle with a centre O.</p> <p>The circle has radius 13 centimetres. AB is a chord of length 20 centimetres.</p> <p>Calculate the width of the shape.</p>	
8	<p>The shape below represents part of a circle with a centre at O.</p> <ul style="list-style-type: none"> • The radius of the circle is 5 cm. • MN is a chord of the circle. • Angle MON is 70° <p>Calculate the area of this shape</p>	
30 marks		