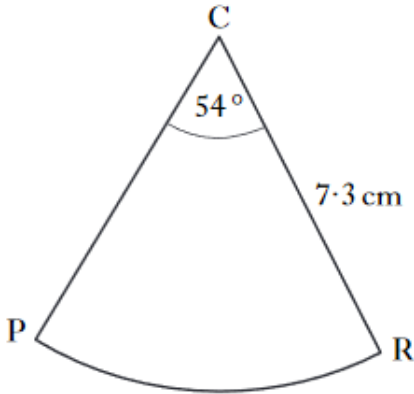
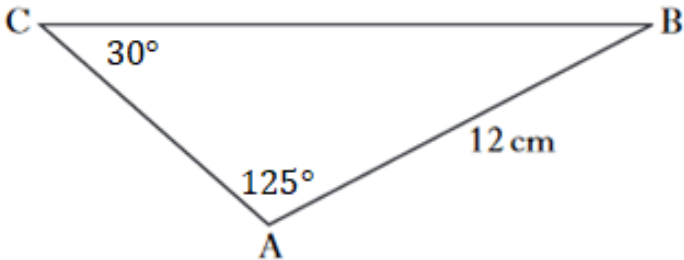


C2	Calculator Paper	
1	<p>£14 000 is placed in a long-term savings account with an interest rate of 4.5% per anum.</p> <p>Calculate the total amount held in the savings account after 4 years.</p> <p>Give your answer rounded to the nearest penny.</p>	3
2	<div style="display: flex; align-items: center;">  <div style="margin-left: 20px;"> <p>The diagram shows a sector of a circle with a centre C.</p> <p>The radius of the circle is 7.3 centimetres and angle PCR is 54°</p> <p>Calculate the length of the arc PR.</p> </div> </div>	3
3	<p>For this triangle:</p> <p>Side AB is 12 cm</p> <p>Angle A is 125°</p> <p>Angle C is 30°</p> <p>Find the length of side BC</p> <div style="text-align: center;">  </div>	3
4	<p>The heights, in centimetres, of 6 netball players are given below.</p> <p style="text-align: center;">170 169 164 172 178 167</p> <p>Calculate the mean and standard deviation for these heights.</p>	4
5	<p>Solve the equation $2x^2 + 3x - 1 = 0$,</p> <p>Give your answers correct to one decimal place.</p>	3

6	<div data-bbox="272 208 831 674" data-label="Image"> </div> <div data-bbox="917 235 1407 571" data-label="List-Group"> <p>In the diagram,</p> <ul style="list-style-type: none"> • O is the centre of the circle • PQ is the diameter of the circle • PQR is a straight line • RS is a tangent to the circle • Angle OPS is 28° </div> <div data-bbox="917 622 1362 667" data-label="Text"> <p>Calculate the size of angle QRS.</p> </div>	3
7	<p>In triangle ABC: AB is 2.7 metres, BC is 4.2 metres and AC is 5.9 metres.</p> <div data-bbox="475 824 1193 1137" data-label="Diagram"> </div> <p>Calculate the size of the largest angle in this triangle.</p>	3
8	<p>Solve algebraically the equation</p> $5 \sin x + 3 = 0, \quad 0 \leq x \leq 360$	3
9	<div data-bbox="379 1451 1225 1711" data-label="Image"> </div> <p>The cylinder and the hemisphere shown above have the same volume. The cylinder has a diameter of 10 centimetres and a height of 4 cm. Calculate the radius of the hemisphere.</p>	5
30 marks		