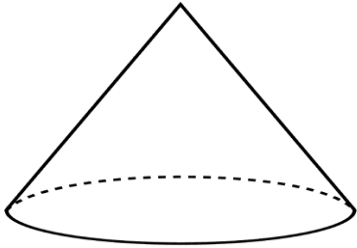
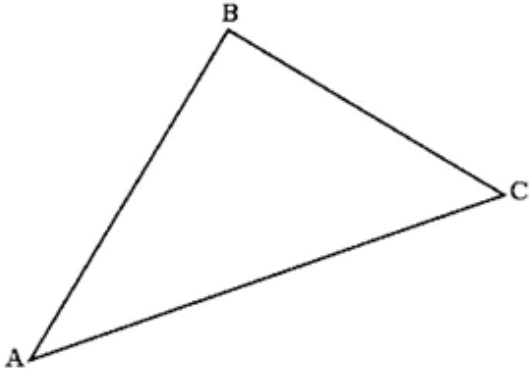
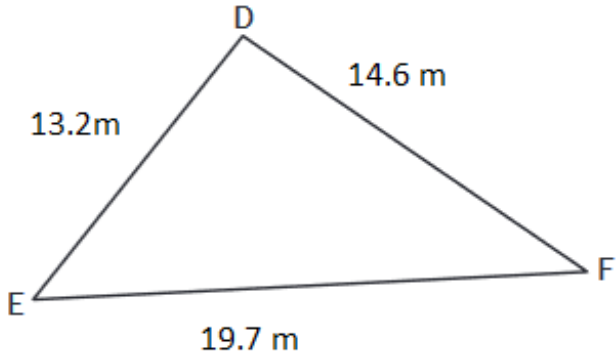
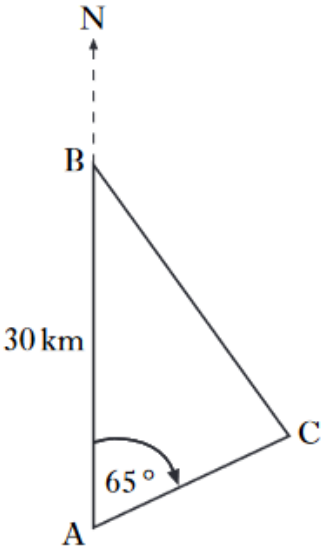
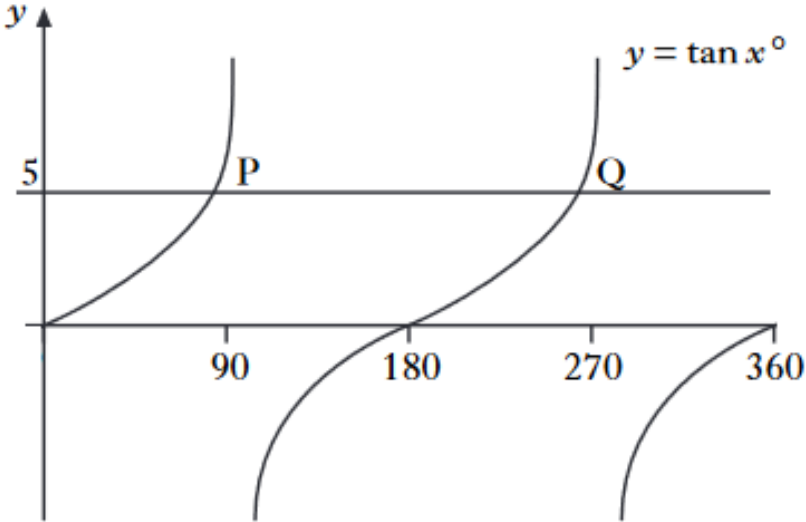


B2	Calculator Paper	
1	<p>An industrial machine costs £177 000. Its value depreciates by 12% each year.</p> <p>How much is it worth after 3 years?</p> <p>Give your answer correct to the nearest whole number</p>	4
2	 <p>Find the volume of a cone with a radius of 370 m and a height of 410 m.</p> <p>Give your answer rounded to 2 significant figures in scientific notation.</p>	4
3	 <p>For triangle ABC:</p> <ul style="list-style-type: none"> AB is 20 cm, BC is 16 cm Angle ABC is 80° <p>Calculate area of this triangle.</p>	2
4	<p>Calculate the equation of the straight line from point A (6, -3) to point F(20, 4)</p> <p>Give the equation of this line in the simplest form.</p>	3
5	<p>For triangle EDF:</p> <ul style="list-style-type: none"> ED is 13.2 metres DF is 14.6 metres EF is 19.7 metres  <p>Is triangle EDF a right-angled triangle?</p>	3

6	<p>Brunton is 30 kilometres due North of Appleton.</p> <p>From Appleton, the bearing of Carlton is 065°</p> <p>From Brunton, the bearing of Carlton is 150°</p> <p>Calculate the distance between Brunton and Carlton</p> 	4
7	<p>The diagram shows part of the graph of $y = \tan x$.</p> <p>The line $y = 5$ is drawn and intersects the graph of $y = \tan x$ at points P and Q.</p>  <p>Find the coordinates of points P and Q.</p>	4
8	<p>simplify $\frac{\cos x^\circ \tan x^\circ}{\sin x^\circ}$</p>	2

9	<p>For the clock shown below counts to one minute. The clock hand OB is pointing to 25 seconds.</p> <div data-bbox="651 293 1043 712" data-label="Diagram"> </div> <p>(a) Calculate the size of angle AOB</p> <p>(b) If the length of the arc AB is 120 centimetres, calculate the length of the clock hand OB</p>	<p>1</p> <p>3</p>
	30 marks	