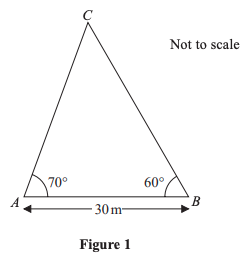
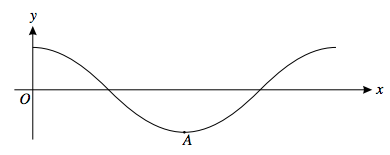
**QQQ - PureYr1 - Chapter 9 –   
Trigonometric Ratios (v3)**

**Total Marks: 16**(16 = Platinum, 14 = Gold, 12 = Silver, 10 = Bronze)

**1.** A triangular lawn is modelled by the triangle  , shown in Figure 1. The length   is to be 30 m long. Given that angle   and angle , calculate the area of the lawn to 3 significant figures. **(4)**

**2.**

The diagram shows part of the curve  , where is in degrees. The point A is the minimum point of this part of the curve.

State the coordinates of A. **(2)**

**3.** In the triangle 𝐴𝐵𝐶 , 𝐴𝐵 = 11 cm, 𝐵𝐶 = 7 cm and 𝐶𝐴 = 8 cm. Find the area of triangle 𝐴𝐵𝐶 , giving your answer in cm2 to 3 significant figures. **(3)**

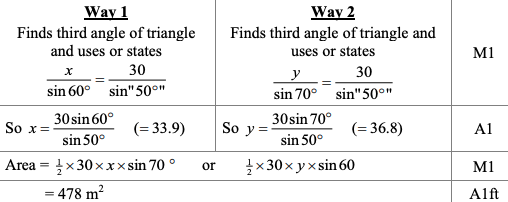
**4.** In the triangle 𝐴𝐵𝐶 , 𝐴𝐵 = 16 cm, 𝐴𝐶 = 13 cm, angle 𝐴𝐵𝐶 = 50° and angle 𝐵𝐶𝐴 = 𝑥 °

(a) Find the size of angle 𝐶 , giving your answer in degrees to 3 significant figures. **(3)**

(b) Find the two possible values for 𝑥 , giving your answers to one decimal place. **(4)**

**Solutions (all questions © Edexcel)**

1.



**2.**

B1 B1

