Q1. *ABC* is an isosceles triangle.
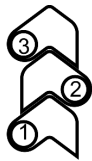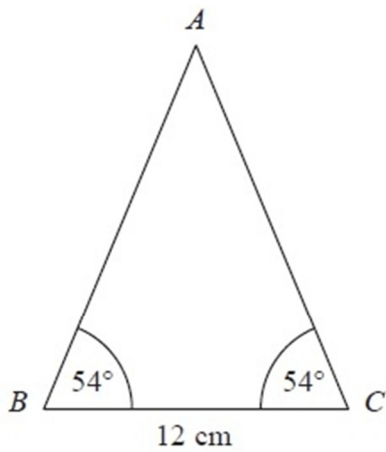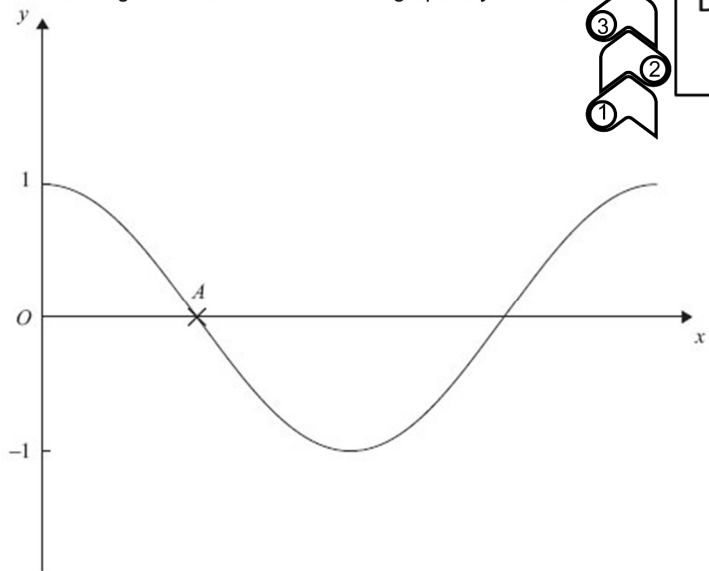

Work out the area of the triangle.

Give your answer correct to 3 significant figures.

.... cm²

(Total for Question is 4 marks)

Q2. The diagram shows a sketch of the graph of $y = \cos x°$

Write down the coordinates of the point *A*.**(Total for Question is 1 mark)**

01
02
03
04
05
06
07
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16
17
18
19
Mixed

Q3. The diagram shows part of a sketch of the curve $y = \sin x°$.
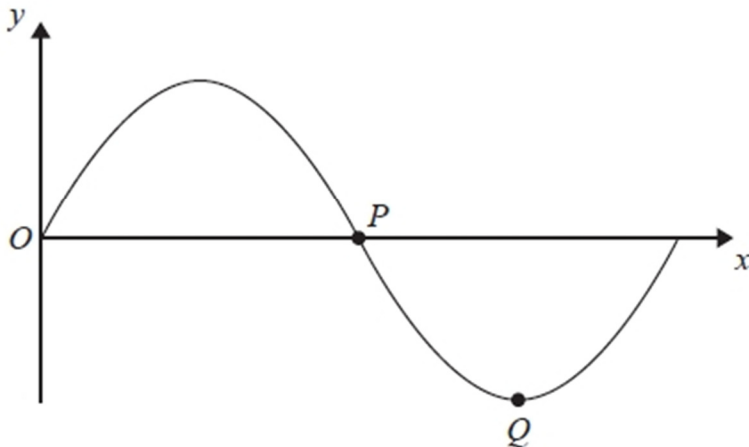
(a) Write down the coordinates of the point *P*.

(............................ , ...) **(1)**

(b) Write down the coordinates of the point *Q*.

(............................ , ...) **(1)**

(Total for Question is 2 marks)
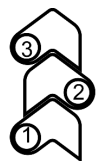
Q4. Here is the graph of $y = \sin x°$ for $-180 \le x \le 180$
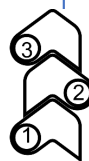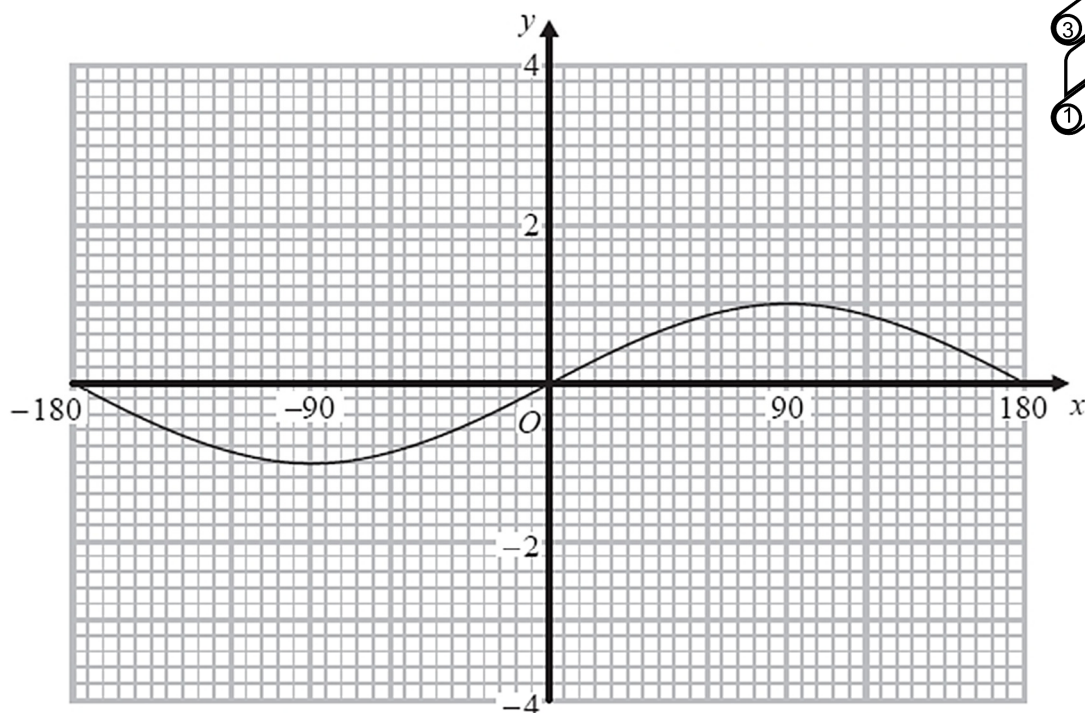
On the grid above, sketch the graph of $y = \sin x° + 2$ for $-180 \le x \le 180$
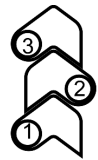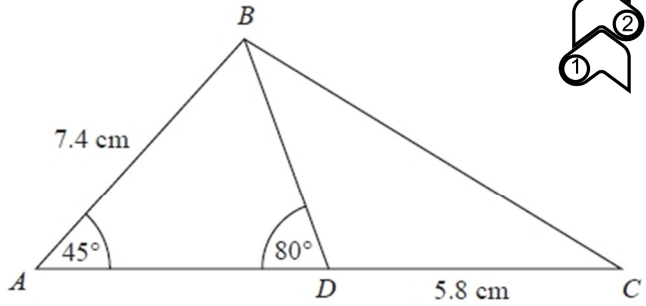
(Total for question is 2 marks)

Q5.
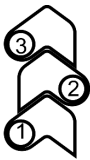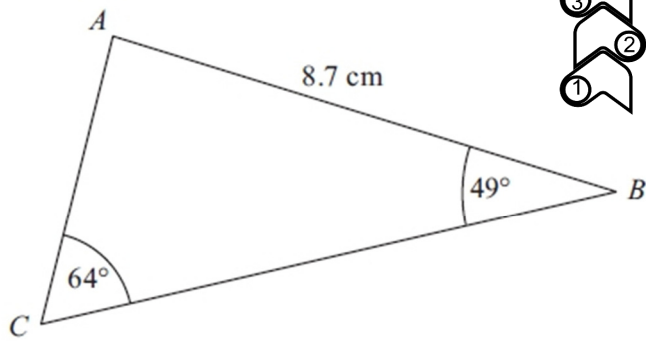
ABC is a triangle.

AB = 8.7 cm.
Angle ABC = 49°.
Angle ACB = 64°.

Calculate the area of triangle ABC.
Give your answer correct to 3 significant figures.

. . . . cm²

(Total for Question is 5 marks)

Q6.
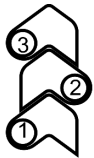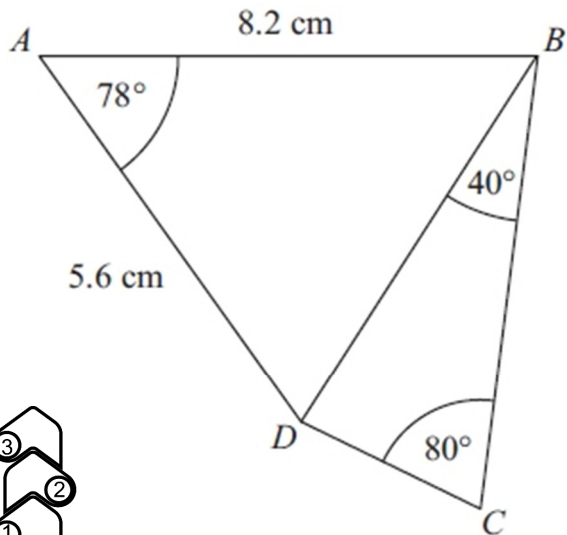

ABC is a triangle.
D is a point on AC.
Angle BAD = 45°
Angle ADB = 80°
AB = 7.4 cm
DC = 5.8 cm

Work out the length of BC.
Give your answer correct to 3 significant figures.

.... cm

(Total for question = 5 marks)

Q8. ABCD is a quadrilateral.

Work out the length of DC.
Give your answer correct to 3 significant figures.

. . . . cm

(Total for Question is 6 marks)

Q10. Jerry wants to cover a triangular field, ABC, with fertiliser.
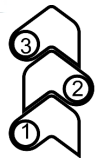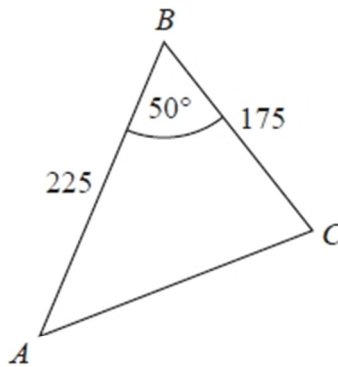
Here are the measurements Jerry makes
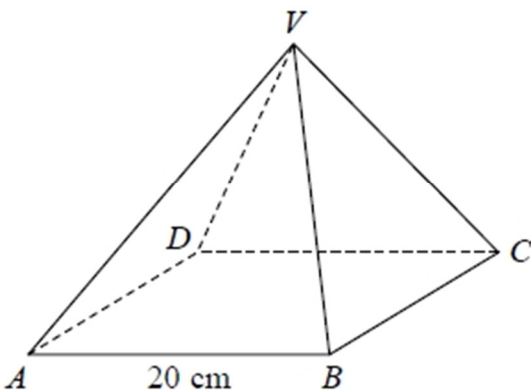
angle ABC = 50° correct to the nearest degree,
BA = 225 m correct to the nearest 5 m,
BC = 175 m correct to the nearest 5 m.

Work out the upper bound for the area of the field.
You must show your working.

....m²

(Total for Question is 3 marks)

Q12. VABCD is a solid pyramid.

ABCD is a square of side 20 cm.

The angle between any sloping edge and the plane ABCD is 55°

Calculate the surface area of the pyramid.
Give your answer correct to 2 significant figures.

....cm²

(Total for question = 5 marks)