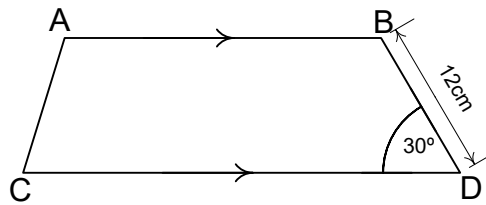**Q1** Below is a diagram of a trapezium.

The ratio of the length of side AB : length of side CD is 7:8.
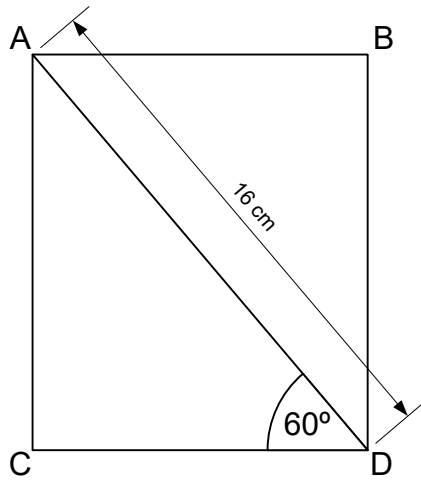
The area of the trapezium is 225cm^2.

What is the length of side CD?

....

(5)

Q2   Below is a farmer's field as shown on a map of scale 1: 5000

AB = CD and AC = BD. Angle ADC = 60°. Angle CAD=30°.

What is the area of the field?
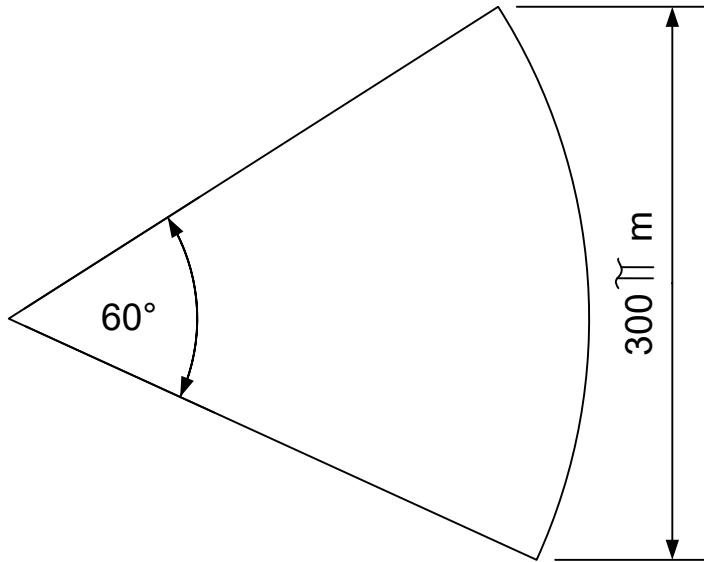
Give your answer as an exact measurement.

....

(5)

Q3 A telescope is placed at the top of a hill.

It has an angle of view of 60°.

The length of the arc that the telescope can cover is 300π m.

What is the total area that the telescope can see?

....

(4)