The City School

**Past Paper Questions**

Shapes and Polygons

MATHEMATICS

Class 8

**Encircle the correct option.**

01. The scale for a drawing is 0.5 cm to 4 m. if a pole in the drawing measures 2.5cm, the length of an actual poles is

A) 40m B) 20m C) 10 m D) 80 m

02. On a map, a distance of 40 km is represented by a 2cm line. What is the scale of the map?

A) 1 : 2000 000 B) 1 : 200 000 C) 1 : 20 000 D) 1 : 2000

03. Two objects are congruent if they have exactly

A) same shape B) same size C) same shape and size D) different shape and size

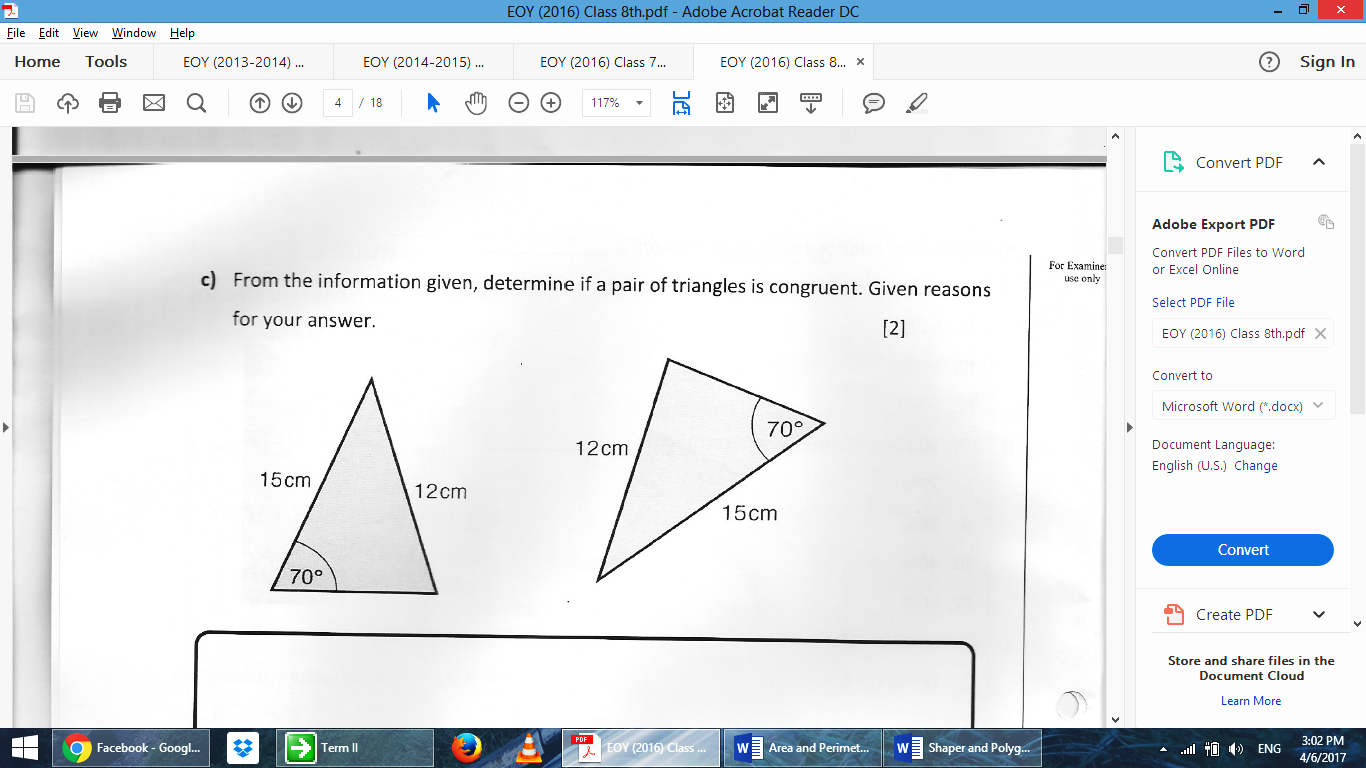
**Questions**

Q no 01) Calculate the actual length in meters represented by each of these lengths on a scale drawing. The scale of each diagram is given in brackets.

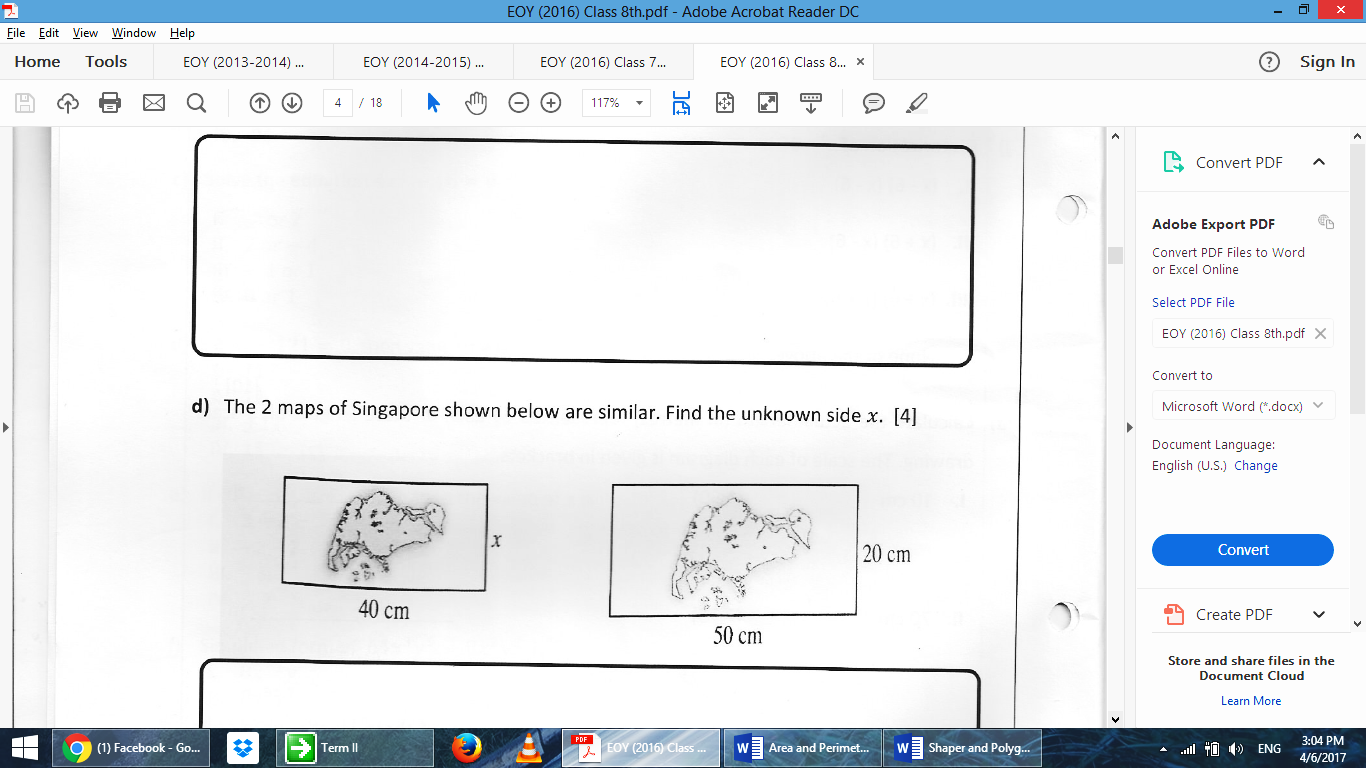
I. 10 cm (1 : 50) II. 70 cm (2 : 75)

Q no 02) Calculate the length in centimeters that represents each of these lengths on a scale drawing. The scale of each diagram is given in brackets.

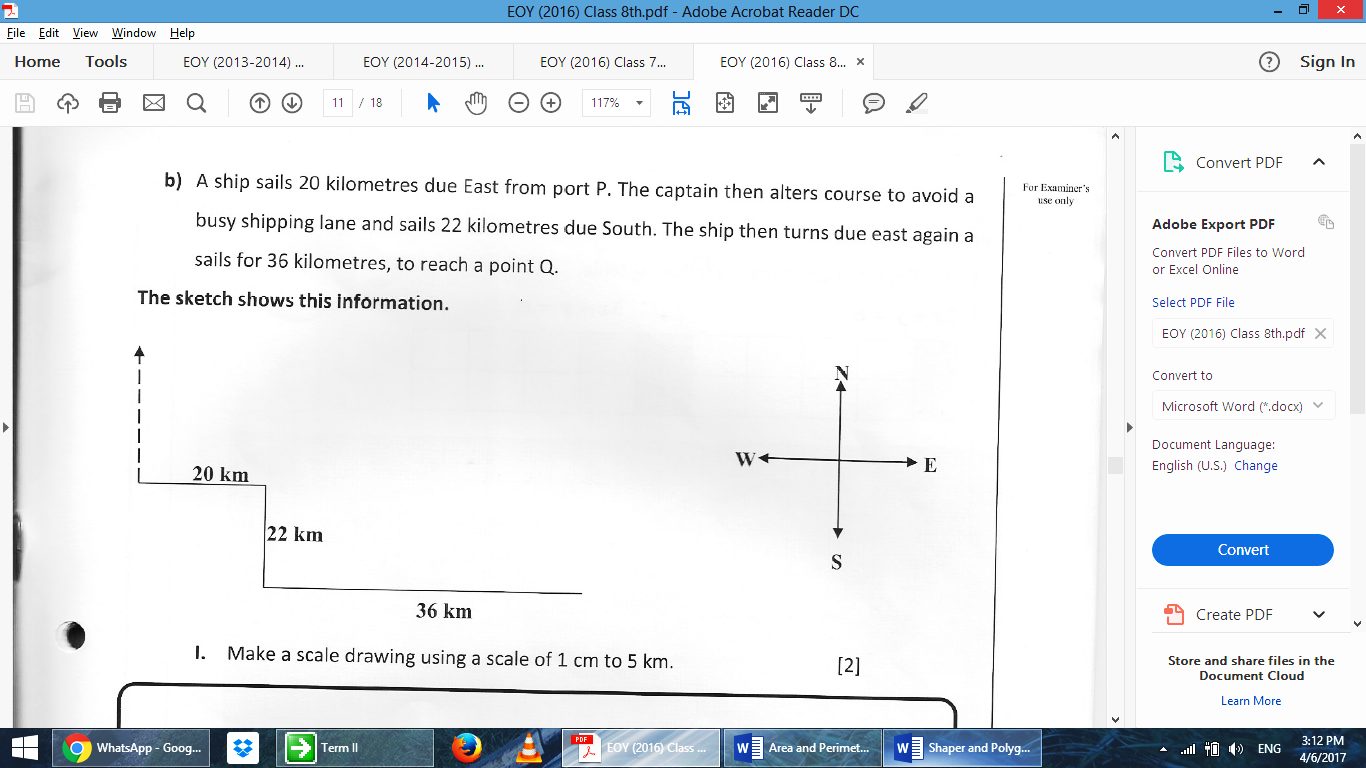
I. 4 cm (1 : 5000) II. 380 cm ((1 : 25)

Q no 03) From the information given, determine if a pair of triangle is congruent. Give reasons for your answer.

Q no 04) The two maps of Singapore shown below are similar. Find the unknown side x.



Q no 05) A ship sails 20 km due East from port P. The captain then alters the course of the ship to avoid a busy shipping lane and sails 22 km due south. The ship then turns due East again and sails for 36 km to reach a point Q.

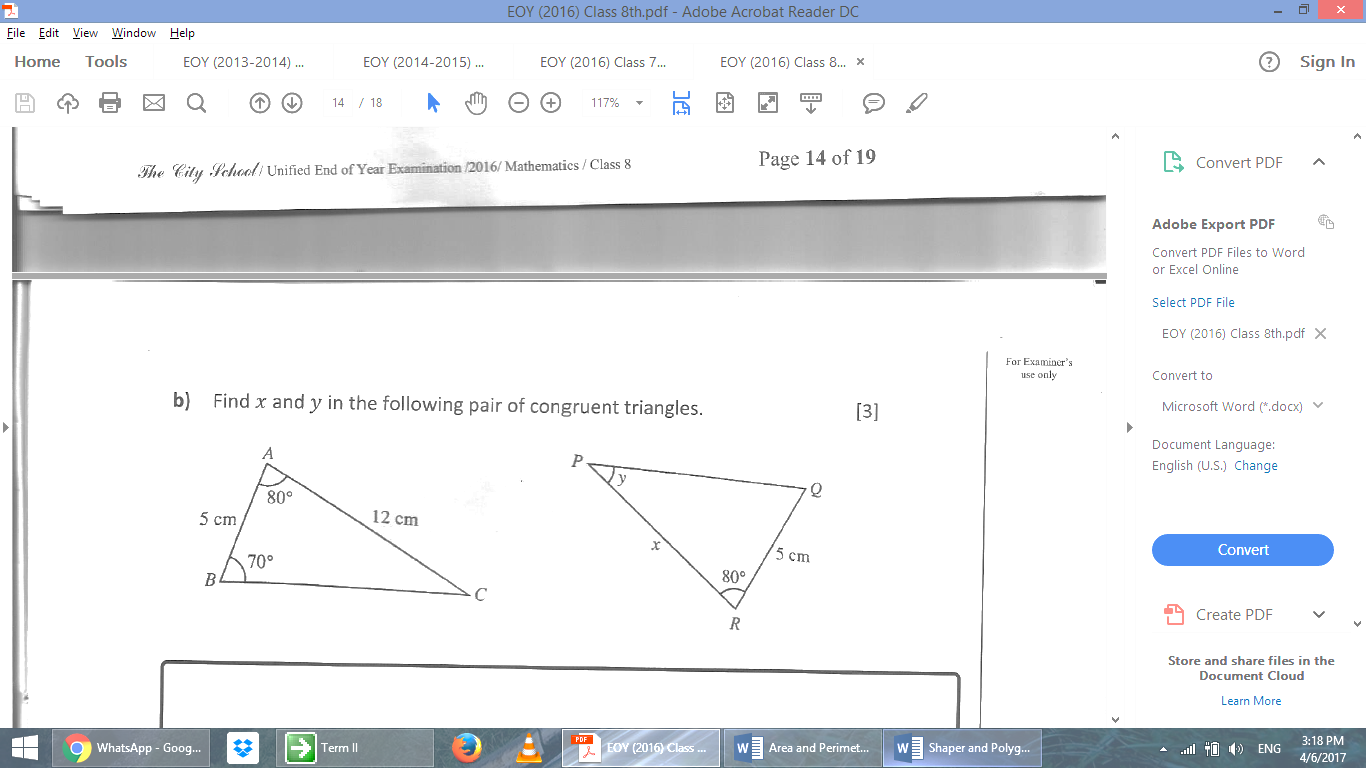


I. Make a scale drawing using a scale of 1cm to 5 km

II. Join P and Q and measure the length of the line in cm.

III. How far is the ship from the port?

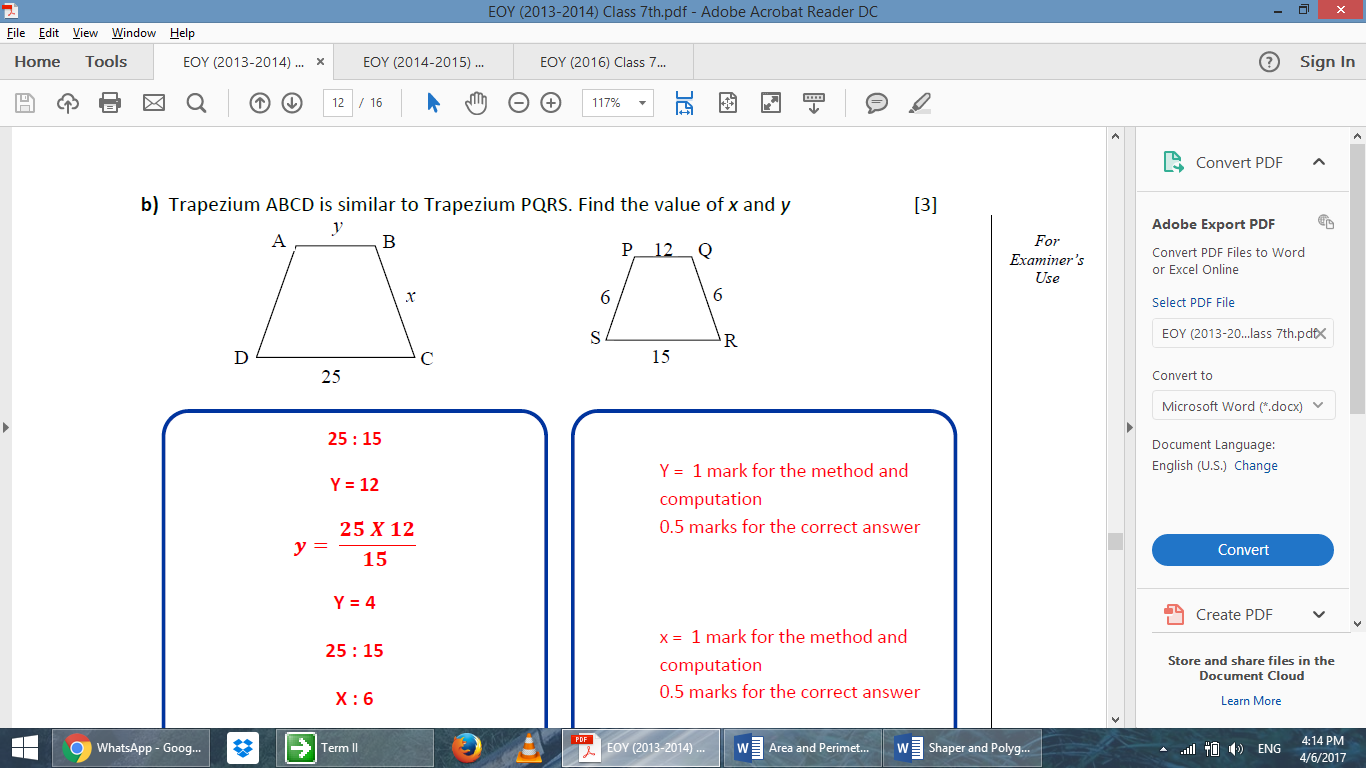
Q no 06) Find x and y in the following pair of congruent triangles.



Q no 07) A map has a scale 1cm to 5m

I. What is the actual length which is 3.5 cm on the map?

II. What length will represent 250 m on the map?

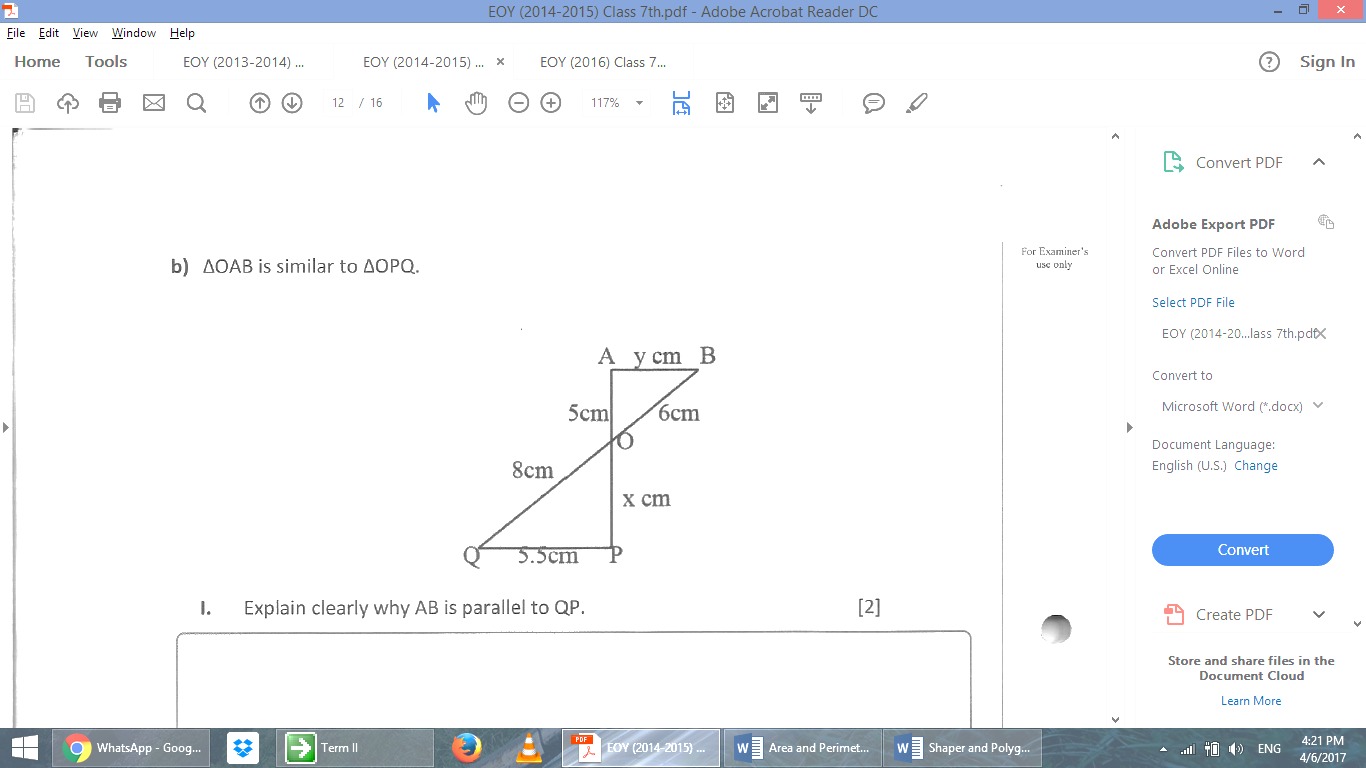
Q no 08) Trapezium ABCD is similar to trapezium PQRS. Find the value of x and y.

Q no 09) A map is drawn to a scale of 1 : 250 000

I. Calculate the distance between two towns on the map if the actual distance is 125 km.

II. A road on the map has a length of 6cm. Find its actual length on the ground.

III. An estate is represented by an area of 8 cm2 on the map. Calculate the actual area of the estate in km2.

Q no 10) ΔOAB is similar to ΔOPQ

I. Explain clearly why AB is parallel to QP

II. If OA = 5cm, OB = 6cm, OQ = 8cm, QP = 5.5cm, OP = x cm and AB = y cm, find the values of x and y.