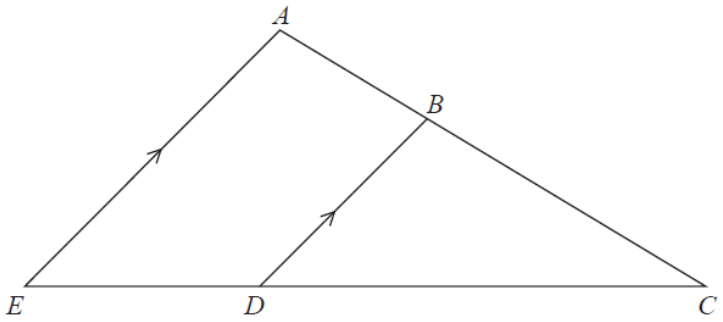
1



ABC and *EDC* are straight lines.
EA is parallel to *DB*.

EC = 8.1 cm.
DC = 5.4 cm.
DB = 2.6 cm.

(a) Work out the length of *AE*.

..... cm

(2)

AC = 6.15 cm.

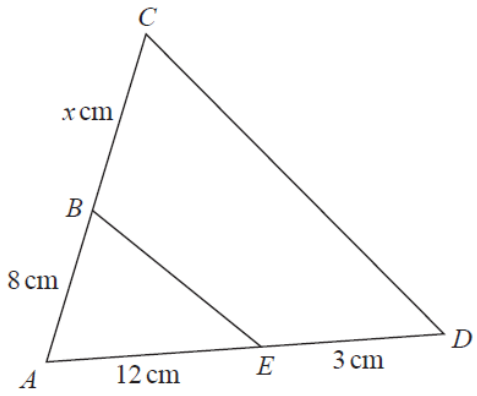
(b) Work out the length of *AB*.

..... cm

(2)

(Total for Question is 4 marks)

2 The two triangles in the diagram are similar.

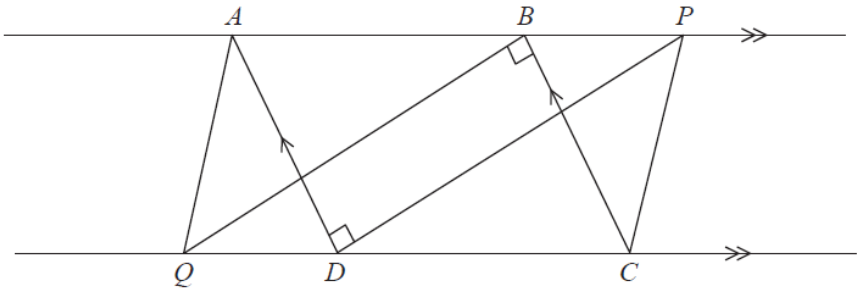


There are two possible values of x.

Work out each of these values.
State any assumptions you make in your working.

(Total for Question is 5 marks)

3



ABCD is a parallelogram.
ABP and *QDC* are straight lines.
Angle *ADP* = angle *CBQ* = 90°

(a) Prove that triangle *ADP* is congruent to triangle *CBQ*.

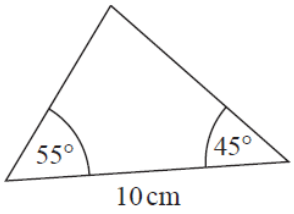
(3)

(b) Explain why *AQ* is parallel to *PC*.

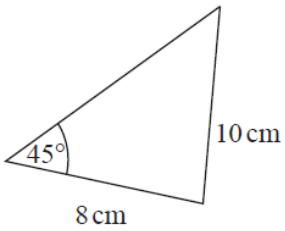
(2)

(Total for Question is 5 marks)

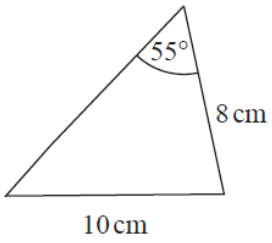
4 The diagram shows four triangles.



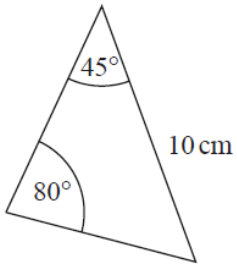
Triangle **A**



Triangle **B**



Triangle **C**



Triangle **D**

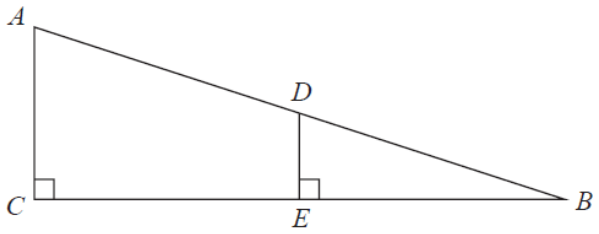
Two of these triangles are congruent.

Write down the letters of these two triangles.

..... and .....

(Total for Question is 1 mark)

5 The diagram shows two right-angled triangles ACB and DEB.



$AD = 9$ cm
$DE = 2$ cm
$DB = 6$ cm

Calculate the length of CB.
Give your answer correct to 2 decimal places.

..... cm

(Total for Question is 4 marks)