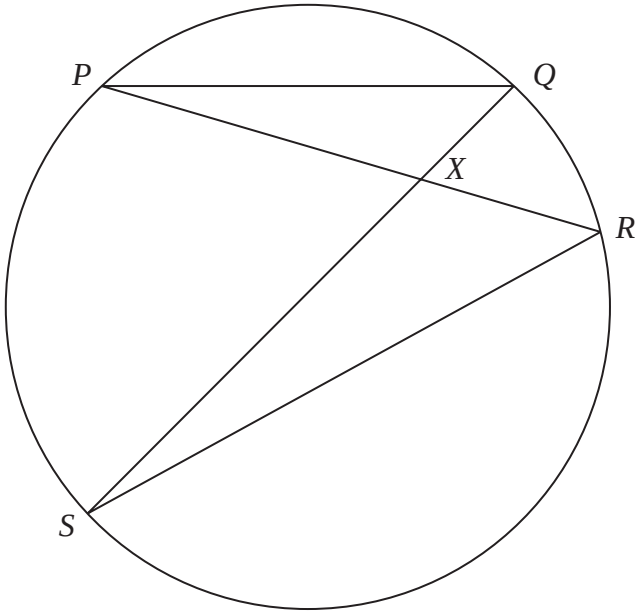
1 *P*, *Q*, *R* and *S* are four points on a circle.

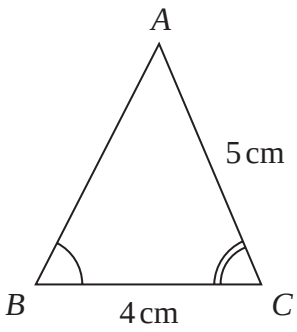


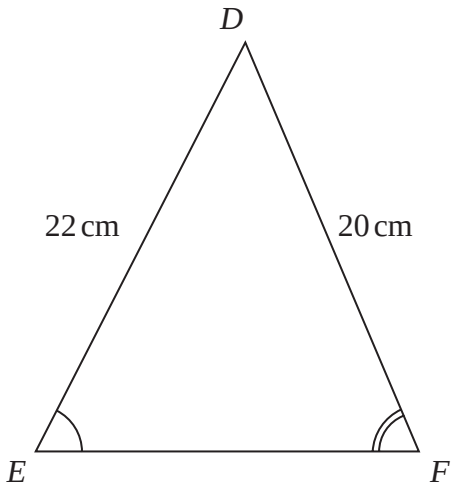
PXR and *SXQ* are straight lines.

Prove that triangle *PQX* and triangle *SRX* are similar.

(Total for Question 1 is 3 marks)

2 Triangle *ABC* and triangle *DEF* are similar.





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

..... cm

(2)

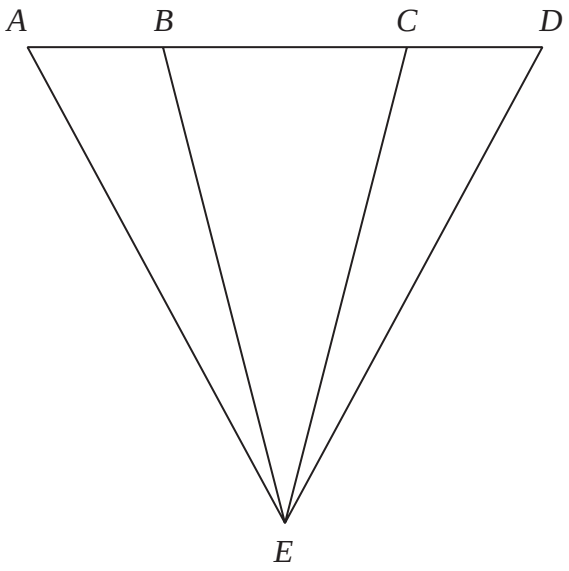
(b) Work out the length of *AB*.

..... cm

(2)

(Total for Question 2 is 4 marks)

3 The diagram shows a triangle *ADE*.



$AE = DE$
$AB : BC : CD = 1 : 2 : 1$

Prove that triangle *ACE* is congruent to triangle *DBE*.

(Total for Question 3 is 3 marks)