

(C2-2.7a) Name:

Homework Questions 7 – Finding an Unknown Side Using the Cosine Rule

Solve the following, give answers to 1dp (*Diagrams are not drawn to scale*)

1. In triangle ABC, $AB = 47\text{cm}$, $BC = 45\text{cm}$, $\angle ABC = 62^\circ$.

What is the size of the length AC

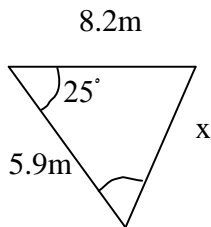
47.4cm

2. In triangle DEF, $DE = 18\text{cm}$, $DF = 20\text{cm}$, $\angle EDF = 46^\circ$.

What is the size of the length EF

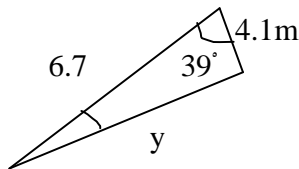
15.0cm

3. Find the size of x



3.8m

4. Find the size of y



4.4m

5. In triangle RST, $ST = 14\text{cm}$, $RT = 29\text{cm}$, $\angle RTS = 35^\circ$.

What is the size of the length RS

19.3cm

6. In triangle ABC, $AC = 48\text{cm}$, $BC = 54\text{cm}$, $\angle BCA = 68^\circ$.

What is the size of the length AB

57.3cm