

(C2-2.4a) Name:

### Homework Questions 4 – Finding an Unknown Side Using the Sine Rule

Solve the following problems using the sine rule, give answers to 1dp (*The diagrams are not drawn to scale*)

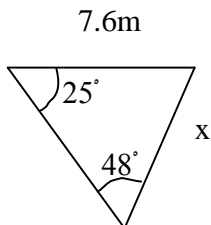
1. In the Triangle ABC,  $AB = 7\text{cm}$ ,  $\angle BAC = 16^\circ$   $\angle ACB = 26^\circ$ . Find the length of BC

4.4cm

2. In the Triangle DEF,  $DE = 9\text{cm}$ ,  $\angle EDF = 25^\circ$   $\angle DFE = 72^\circ$ . Find the length of DF

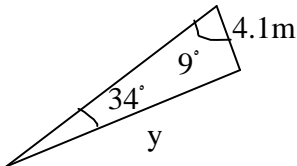
9.4cm

3. Find the length of x



4.3m

4. Find the length of y



1.1m

5. In the Triangle RST,  $RT = 30\text{cm}$ ,  $\angle STR = 65^\circ$   $\angle RST = 18^\circ$ . Find the length of RS

88.0cm

6. In the Triangle ABC,  $BC = 19\text{cm}$ ,  $\angle BAC = 63^\circ$   $\angle ABC = 39^\circ$ .

Find the length of AC

13.4cm