

7.4 Homework

GCSE Mathematics Non-Right Angled Trigonometry

Question 1

$\triangle ABC$ has $\angle A = 38^\circ$, and $\angle B = 64^\circ$.

Side AB is of length 30 cm.

- (i) What is the size of angle C , the third angle ?
- (ii) Sketch the triangle, not to scale, and mark on all known lengths and angles.
- (iii) Find the length of side BC correct to three significant figures.

HINT ☐ Write out The Sine Rule in full for $\triangle ABC$

☐ Circle which to find

☐ Box known pair

Question 2

$\triangle FRT$ has $\angle R = 30^\circ$ and $\angle T = 100^\circ$.

Side RT is of length 16 km.

- (i) What is the size of angle F , the third angle ?
- (ii) Sketch the triangle, not to scale, and mark on all known lengths and angles.
- (iii) Find the length of side FT clearly stating the units of your answer.

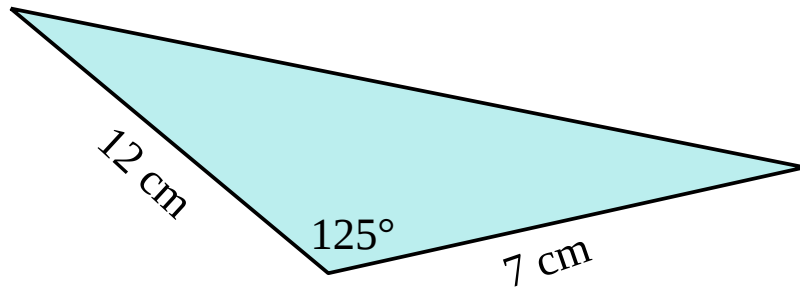
HINT ☐ Write out The Sine Rule in full for $\triangle FRT$

☐ Circle which to find

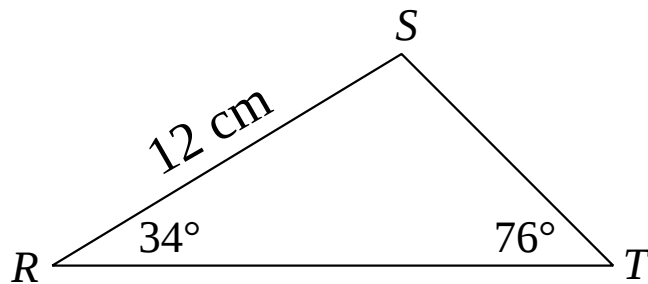
☐ Box known pair

Question 3

Find the area of the following triangle:



Question 4



Find the length of side ST correct to three significant figures.