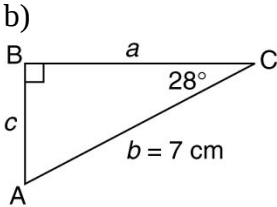
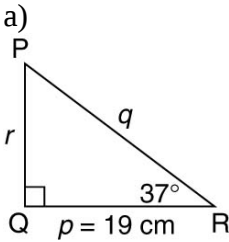


Primary Trigonometric Ratios

• $\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$ $\cos \theta = \frac{\text{adjacent}}{\text{hypotenuse}}$ $\tan \theta = \frac{\text{opposite}}{\text{adjacent}}$

1. Solve each triangle for the missing side. Round lengths to the nearest unit and angles to the nearest degree. (4 marks)

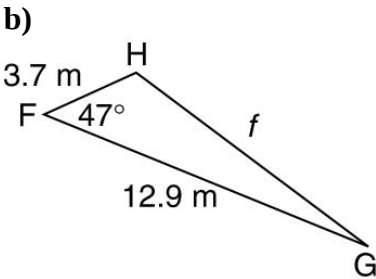
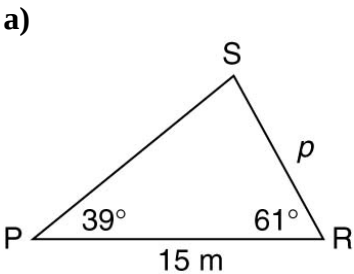


The Sine Law and the Cosine Law

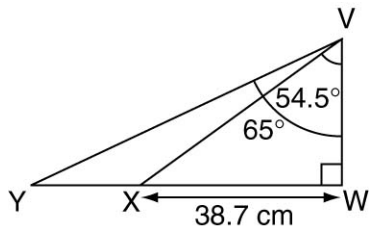
$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}, \quad \text{or} \quad \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

Cosine law: $a^2 = b^2 + c^2 - 2bc \cos A$.

Find the length of each indicated side, to the nearest tenth. (6 marks)



2. Find XY , to the nearest tenth of a centimeter. (6 marks)



3. Find the measure of the indicated angle, to the nearest tenth of a degree. (8 marks)

