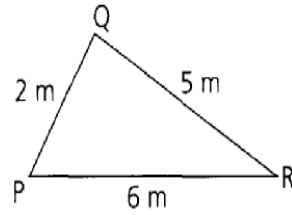


1 Write down the length of the sides:

a p

b q

c r

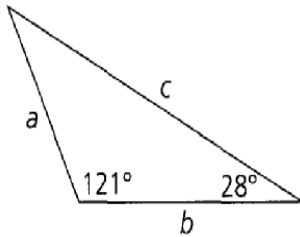


2 What is the size of:

a angle A

b angle B

c angle C



3 Given $\frac{a}{\sin A} = \frac{b}{\sin B}$ find a , correct to one decimal place, if $b = 5$, $\angle A = 70^\circ$ and $\angle B = 56^\circ$.

4 If $\sin C = 0.376$ find the size of $\angle C$, to the nearest minute, if $\angle C$ is obtuse.

5 If B is an acute angle, find its size, to the nearest degree, given that $\frac{\sin B}{b} = \frac{\sin C}{c}$ and $b = 4.2$, $c = 5.7$ and $\angle C = 64^\circ$.

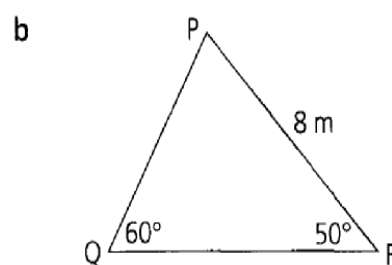
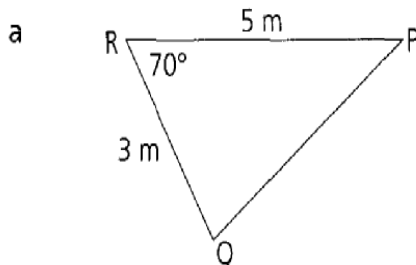
6 Given $c^2 = a^2 + b^2 - 2ab \cos C$ and $c > 0$ find the value of c , correct to two decimal places, if:

a $a = 3.7$, $b = 2.8$ and $\angle C = 60^\circ$

b $a = 65$, $b = 21.1$ and $\angle C = 146^\circ$.

7 If $\cos A = \frac{b^2 + c^2 - a^2}{2bc}$, find the size of angle A if $a = 7$, $b = 5$ and $c = 8$.

8 Which rule, sine rule or cosine rule, should be used to find the length of PQ in the diagrams below?



9 Given $\text{area} = \frac{1}{2} ab \sin C$ find the area of a triangle where $a = 8$, $b = 4$ and $\angle C = 30^\circ$.