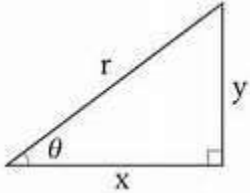


YEAR 10 MATHS WEEKLY HOME PACKAGE 2 SOLUTION

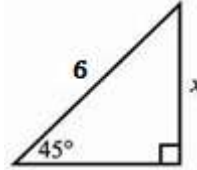
Activity Question

1. Identify the sides of the right angled triangles using the angle θ .



r – hypotenuse
x – adjacent side
y – opposite side

2. Given below is a right angled triangle with an angle of 45° .



Find the length of the side labelled, x

Using the angle 45° , the side labelled 6 is the hypotenuse and x is the opposite side.

We are interested in O and H

SOH CAH TOA; thus $\sin \theta = \frac{\text{opposite}}{\text{hypotenuse}}$

$$\sin 45 = \frac{x}{6}$$

$$\sin 45 = \frac{x}{6}$$

$$x = 6 \sin 45$$

$$x = 4.24 \text{ (round off to 2 decimal place).}$$

The length of the side labelled, x is **4.24 units**