# Pythagoras' Theorem

## Literacy

Pythagoras' Theorem

Right-angled triangle

Hypotenuse

#### Research

Which other discoveries did Pythagoras make and do they still affect our everyday life today?

## Memory

 $a^2 + b^2 = c^2$ 

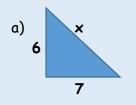
Hypotenuse

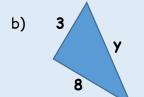
#### Help

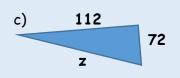


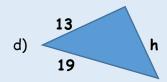
#### Skills

1) Find the unknown side (3 s.f.) of the following right-angled triangles:

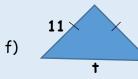






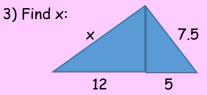






2) Show that Triangle ABC with lengths 9 cm, 15 cm and 12 cm is a right-angled triangle.

#### Stretch



- 4) A woman leaves home and walks 2 km to the North followed by 4 km to the West. How far, corrected to the nearest meter, is the woman from home?
- 5) Calculate the length of the line segment connecting points A(2, -7) and B(-1, -5).

## Answer-key

- 1)
- a) 9.22
- b) 8.54
- c) 133
- d) 13.9
- e) 5.92
- f) 15.6
- **2)**  $9^2 + 12^2 = 15^2$ 
  - 81 + 144 = 225
- 3) 13.2
- 4) 4472 m
- 5) 3.61

