© MathSphere www.mathsphere.co.uk
Puzzle time
A square triangle ????????
This is a problem for our older puzzlers.
It may seem very peculiar to you but I've just drawn a triangle where all the angles are square.
No, I don't mean right angles or 90 ⁰ - that's impossible!
What I do mean is that each angle, measured in degrees, is a square number.
Can you tell me how many degrees each of the angles is?
Help!
Clue: the total of the three angles in a triangle is 180 [°] .
Can you remember what square numbers are? Try 1 x 1, 2 x 2, etc
Find the answer on the next page.

© MathSphere www.mathsphere.co.uk



Puzzle time

A square triangle - answer

Remember the problem: a triangle with all the angles being square numbers!

The clue was that the total of the three angles in a triangle is 180°.

1

4

You get a square number by multiplying a number by itself, so:

The square numbers are:



There are three angles in a triangle (Yes there are!) so which three square numbers make 180?

The answer is:

 $10 \times 10 = 100$

100 + 64 + 16