



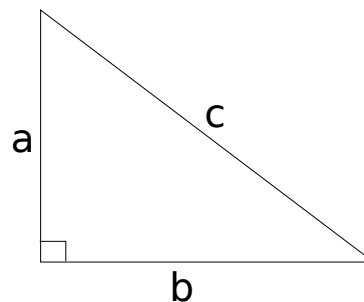
Problem of the Week

Problem B

Right On, Dude!

Let's explore some right angled triangles.

- a) On centimetre graph paper, construct a right angle with sides $a = 3$ cm and $b = 4$ cm which meet at the right angle. Measure the length of the third side c . Enter your answer in the table below.



- b) Next, construct a right angled triangle with sides $a = 6$ cm and $b = 8$ cm which meet at the right angle. How long do you think the third side c will be? Measure it to find out, and enter its length in the table.
- c) Look at the patterns for sides a , b , and c in your table to try to predict the side lengths b and c for the next triangle in the table. Draw this triangle to confirm your predictions, and enter the lengths in the table.
- d) Repeat part c) to complete the table.
- e) Write a pattern rule for the length of each side in the table.

Triangle	Side a (cm)	Side b (cm)	Side c (cm)
Part a)	3	4	
Part b)	6	8	
Part c)	9		
Part d)	12		

