**What does 6 ÷ 2(2 + 1) equal?**

This is the subject of a poll on the internet!

The main controversy was whether the answer is 1 or 9.

Some people thought that BOTH answers were correct!

There is, of course, a UNIQUE answer and I will explain it in great detail to avoid any confusion.

Firstly there is a world-wide convention about the order in which we do the arithmetical operations. There are several mnemonics which help people remember the order, such as BIDMAS which means:

**B** = do brackets first

**I** = do Indices next

**D** = Division and **M** = Multiplication but these are EQUAL in importance.

If they both occur we simply start from the left

**A** = Addition and **S** = Subtraction and these are also EQUAL in importance.

If the problem has been reduced to just additions and subtractions, we start from the left.

 Now consider: **6 ÷ 2(2 + 1)**

 This actually MEANS: **6 ÷ 2 × (2 + 1)**

 Brackets first produces: **6 ÷ 2 × 3**

D and M are equal so starting from the left: **3 × 3**

 Finally do M: **9**

The only correct answer is of course **9**

Incidentally, if we wanted to divide the **6** by **2(2+ 1)** we would NEED more brackets as follows:

 **6 ÷ ( 2(2 + 1) )**

 = **6 ÷ ( 2×(2 + 1) )**

 = **6 ÷ ( 2×( 3 ) )**

 = **6 ÷ ( 6 )**

 = 1