> **YOU & MATHS**   Attendance at a concert was 480. The ratio of adults to students was 5 to 3. How many adults attended?
>
> (USA *Southeast Missouri State University: Math Field Day*, 2005)

The trick to solving this exercise is to write a proportion using the information we have.

For every 5 adults, there were 3 students who attended the concert. That is, for $5 + 3 = 8$ people who attended the concert, 5 were adults and 3 were students. We also know that the total number of the participants was 480.

Now we have all the information we need to set up the proportion. If we call x the number of adults, we have:

$8 : 5 = 480 : x$.

Using the properties of proportions, we get:

$8x = 2400 \rightarrow x = \dfrac{2400}{8} = 300$.

We have therefore learned that 300 adults attended the concert.