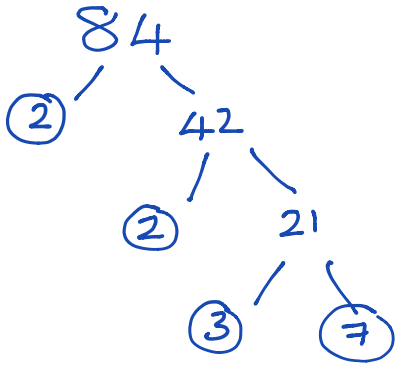
Write 84 as a product of its prime factors.

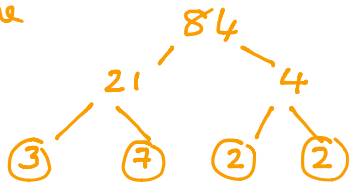


This can then be written as a product of prime factors

$2 \times 2 \times 3 \times 7$

<u>OR</u> $2^2 \times 3 \times 7$.

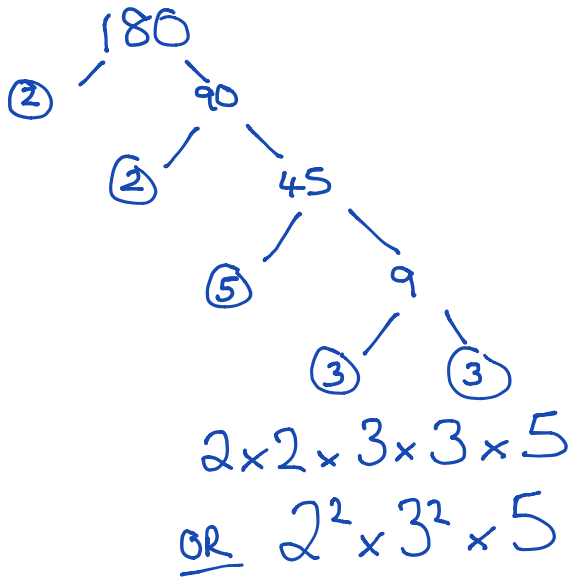
Remember there are several ways of 'splitting' 84 and all will end up with the same prime factors... here's a different one



$2 \times 2 \times 3 \times 7$ or $2^2 \times 3 \times 7$

neither are prime numbers so I've got to carry on...

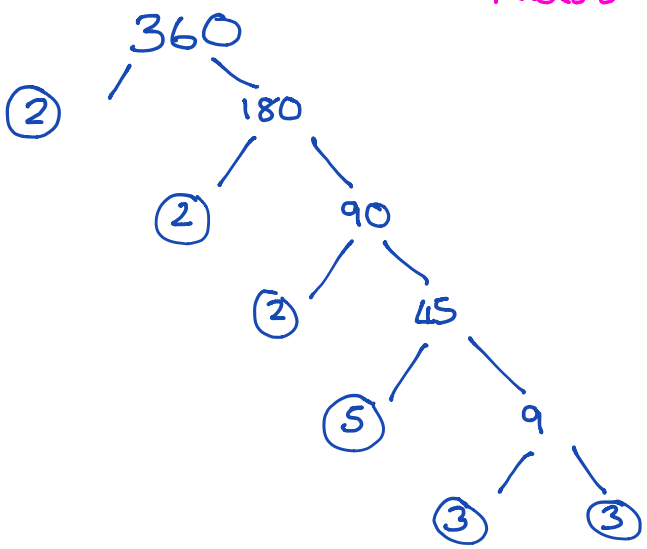
Express 180 as a product of its prime factors.



JustMaths

Write 360 in the form $2^a \times 3^b \times 5^c$

this doesn't mention prime factors anywhere....



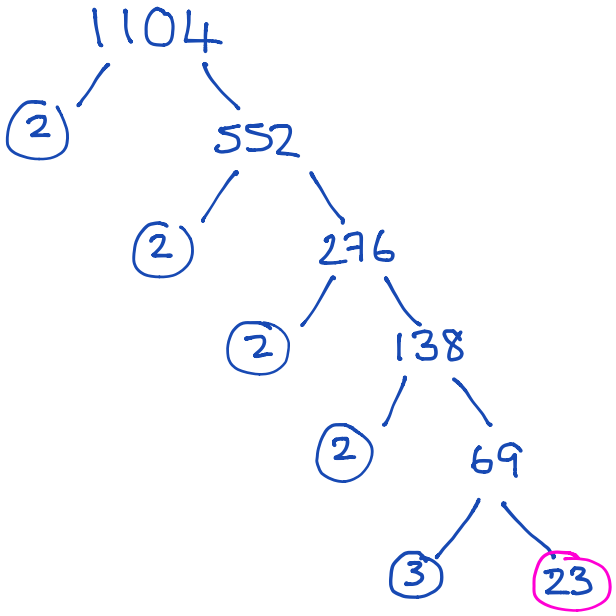
$2 \times 2 \times 2 \times 3 \times 3 \times 5$

$2^3 \times 3^2 \times 5$

This looks like the question ☺

The number 1104 can be written as $3 \times 2^c \times d$, where c is a whole number and d is a prime number.

Work out the values of c and d.



Again product of prime factors isn't mentioned

23 is a prime number

$2 \times 2 \times 2 \times 2 \times 3 \times 23$

Comparing to the question....

$3 \times 2^4 \times 23$

so $c = 4$ and $d = 23$