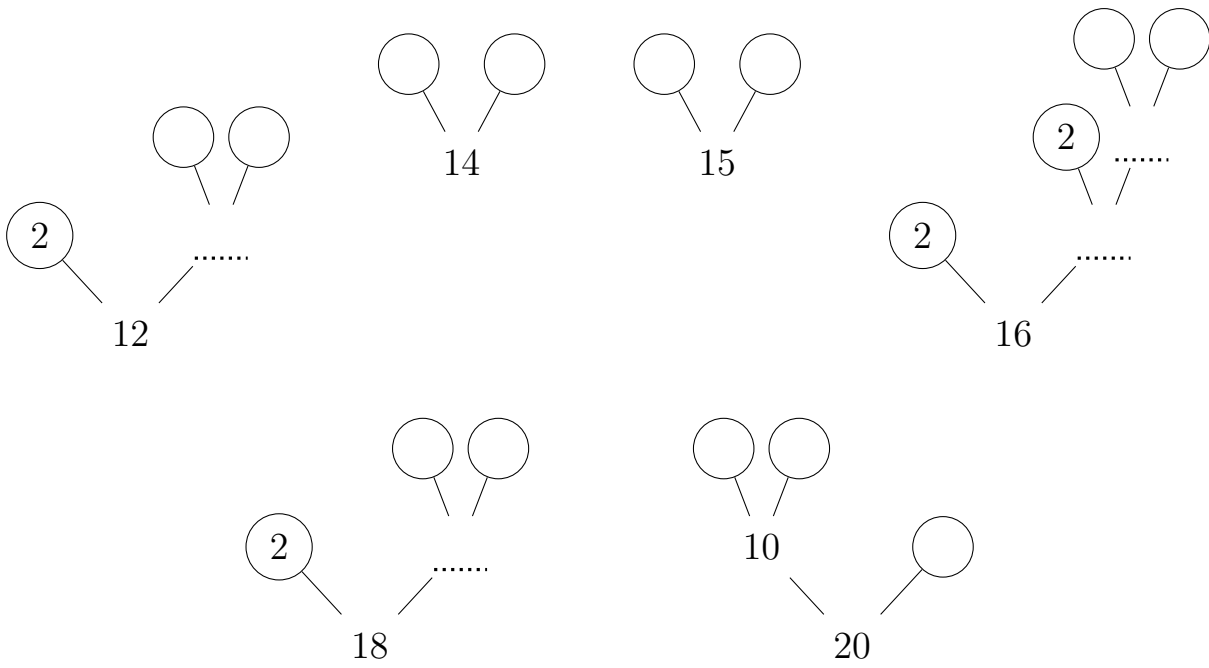


1. (i) Complete these prime factor trees.



(ii) Write down a list of the prime numbers from 11 to 20

2. (i) Draw the prime factor trees for all the **non prime** numbers from 11 and 20

(ii) Write a list of the prime numbers between 11 and 20

3. A student wrote “the prime numbers between 11 and 20 are 11, 13, 15, 17 and 19”

The student is wrong.

Explain what is wrong with the students statement.

.....

Answers

1. (i) $12 = 2 \times 2 \times 3$, $14 = 2 \times 7$, $15 = 3 \times 5$, $16 = 2 \times 2 \times 2 \times 2$, $18 = 2 \times 3 \times 3$, $20 = 2 \times 2 \times 5$
(ii) 11, 13, 17, 19
2. (i) $12 = 2 \times 2 \times 3$, $14 = 2 \times 7$, $15 = 3 \times 5$, $16 = 2 \times 2 \times 2 \times 2$, $18 = 2 \times 3 \times 3$, $20 = 2 \times 2 \times 5$
(ii) 11, 13, 17, 19
3. 15 is not prime because e.g. 3×5 are a factor pair (or similar)