

Finding the HCF

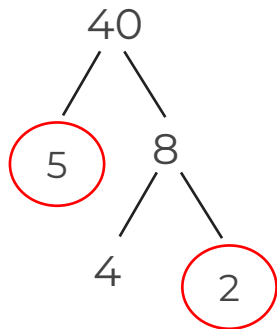
Maths

Mr Lund



Finding the HCF

1. Troy is writing 40 as a product of its prime factors. He draws a factor tree to help him.

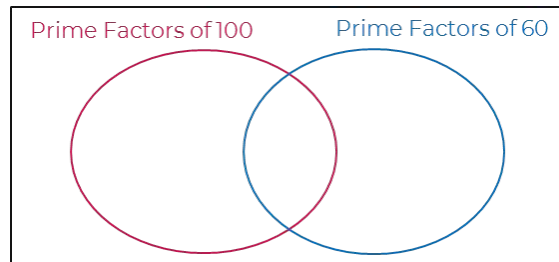


- a) Complete the factor tree for 40
- b) Write 40 as a product of its prime factors.

2. a) Write 100 as a product of its prime factors.

b) Write 60 as a product of its prime factors.

c) Complete the Venn diagram.



d) Work out highest common factor (HCF) of 100 and 60



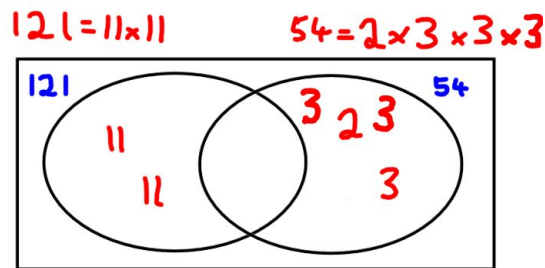
Finding the HCF

3. Work out the HCF of each of the following pairs of numbers

- a) 45 and 60
- b) 48 and 72
- c) 120 and 150
- d) 90 and 72
- e) 180 and 96

4. Tom wants to find the HCF of 121 and 54

He writes each number as the product of its prime factors and draws a Venn diagram.



What is the HCF of 121 and 54?

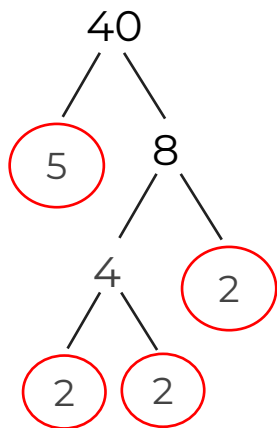


Answers



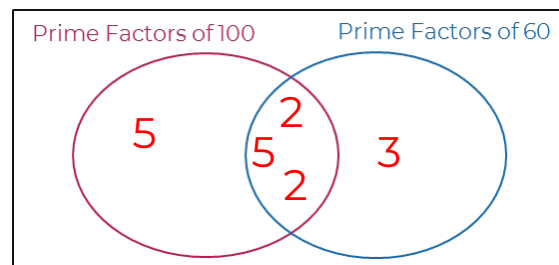
Finding the HCF

1. Troy is writing 40 as a product of its prime factors. He draws a factor tree to help him.



- a) Complete the factor tree for 40
- b) Write 40 as a product of its prime factors. $40 = 2^3 \times 5$

2. a) Write 100 as a product of its prime factors. $= 2 \times 2 \times 5 \times 5 = 2^2 \times 5^2$
- b) Write 60 as a product of its prime factors. $= 2 \times 2 \times 3 \times 5 = 2^2 \times 3 \times 5$
- c) Complete the Venn diagram.



- d) Work out highest common factor (HCF) of 100 and 60 20



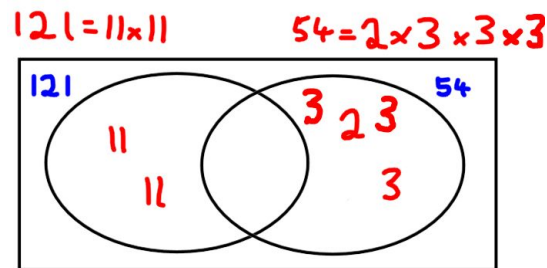
Finding the HCF

3. Work out the HCF of each of the following pairs of numbers

- a) 45 and 60 15
- b) 48 and 72 24
- c) 120 and 150 30
- d) 90 and 72 18
- e) 180 and 96 12

4. Tom wants to find the HCF of 121 and 54

He writes each number as the product of its prime factors and draws a Venn diagram.



What is the HCF of 121 and 54? 1

