

Finding the HCF

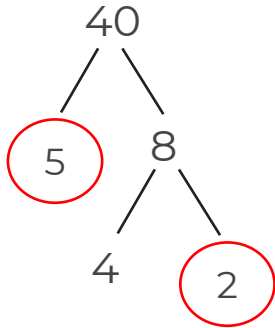
Maths

Mr Lund



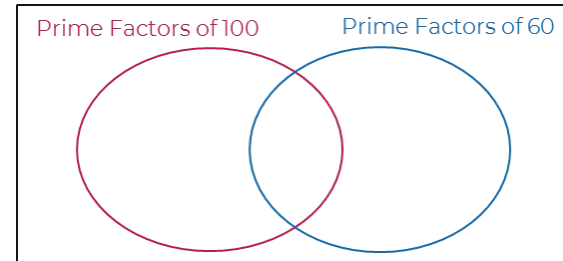
Finding the HCF

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



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

- 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.



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



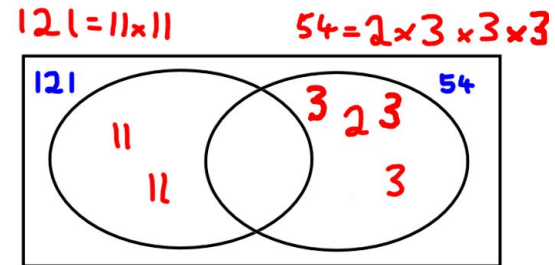
Finding the HCF

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?

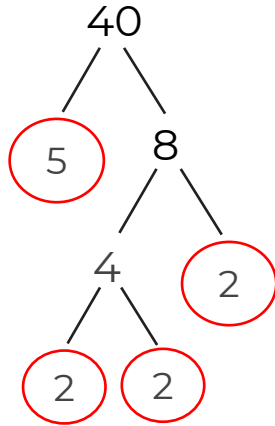


Answers



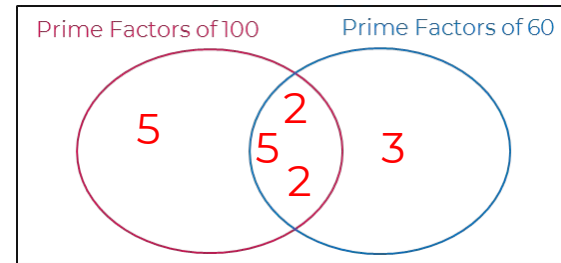
Finding the HCF

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



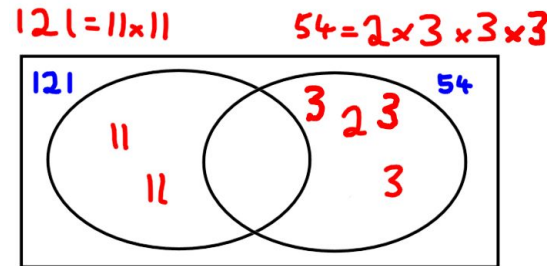
Finding the HCF

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

