

SESSION : 15
CLASS : IV
SUBJECT : MATHEMATICS
CHAPTER NUMBER : 10
CHAPTER NAME : FACTORS AND MULTIPLES
SUBTOPIC : HCF BY COMMON DIVISION
METHOD, EX-10 D Q.NO. 3

CHANGING YOUR TOMORROW

LEARNING OBJECTIVE

- Enable the students to understand the process of common division method to find HCF.

HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(a) 40 and 60.

2	40, 60
2	20, 30
5	10, 15
	2, 3

Hence, the common factors are **2 , 2 , 5**

$$\text{HCF of 40 and 60} = \mathbf{2 \times 2 \times 5 = 20}$$



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(b) 45 and 225.

5	45, 225
3	9, 45
3	3, 15
	1, 5

Hence, the common factors are **5 , 3 , 3**

$$\text{HCF of 45 and 225} = \mathbf{5 \times 3 \times 3 = 45}$$



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(c) 21, 63 and 189.

3	21, 63, 189
7	7, 21, 63
	1, 3, 9

Hence, the common factors are **3, 7**

$$\text{HCF of 21, 63 and 189} = \mathbf{3} \times \mathbf{7} = \mathbf{21}$$



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(d) 87 and 145.

29	87, 145
	3, 5

Hence, the common factors are **29**

HCF of 87 and 145 = **29**



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(e) 14 and 28.

2	14, 28
7	7, 14
	1, 2

Hence, the common factors are **2, 7**

$$\text{HCF of 14 and 28} = \mathbf{2 \times 7 = 14}$$



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(f) 144, 252 and 228.

2	144, 252, 228
2	72, 126, 114
3	36, 63, 57
	12, 21, 19

Hence, the common factors are **2** , **2** , **3**

HCF of 144, 252 and 228 = **2** × **2** × **3** = **12**



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(g) 125, 175 and 225.

5	125, 175, 225
5	25, 35, 45
	5, 7, 9

Hence, the common factors are **2** , **5**

HCF of 125, 175 and 225 = **2** × **5** = **10**



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(h) 27 and 162.

3	27, 162
3	9, 54
3	3, 18
	1, 6

Hence, the common factors are **3** , **3** , **3**

$$\text{HCF of 27 and 162} = \mathbf{3 \times 3 \times 3 = 27}$$



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(i) 69 and 92.

$$\begin{array}{r|l} 23 & 69, 92 \\ \hline & 3, 4 \end{array}$$

Hence, the common factors are **23**

HCF of 69 and 92 = **23**



HCF BY COMMON DIVISION METHOD



Exercise 10(D)

3. Find the HCF of the following by common division method:

(j) 96, 144 and 168.

2	96, 144, 168
2	48, 72, 84
2	24, 36, 42
3	12, 18, 21
	4, 6, 7

Hence, the common factors are **2, 2, 2, 3**

HCF of 125, 175 and 225 = **2 × 2 × 2 × 3 = 24**



HOME ASSIGNMENT:

- **Complete Exercise – 10(D) Q.NO. 3 in your note book.**

LEARNING OUTCOME:

Students are able to understand the process of common division method to find HCF.

THANKING YOU
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