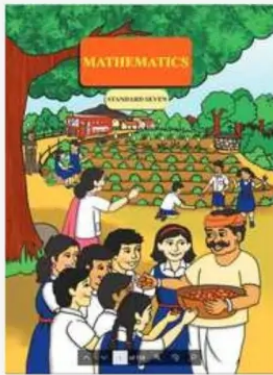


Maharashtra Board Solutions Class 7-Maths (Practice Set 12): Chapter 3- HCF and LCM

BOOK SOLUTIONS
CLASS 7
MATHS

CHAPTER 3
HCF and LCM





Maharashtra Board Solutions→

For any clarifications or questions you can write to info@indcareer.com

Postal Address

IndCareer.com, 52, Shilpa Nagar, Somalwada Nagpur - 440015
Maharashtra, India

WhatsApp: +91 9561 204 888, **Website:** <https://www.indcareer.com>

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>



Maharashtra Board Solutions Class 7-Maths (Practice Set 12): Chapter 3- HCF and LCM

Class 7: Maths Chapter 3 solutions. Complete Class 7 Maths Chapter 3 Notes.

Maharashtra Board Solutions Class 7-Maths (Practice Set 12): Chapter 3- HCF and LCM

Maharashtra Board 7th Maths Chapter 3, Class 7 Maths Chapter 3 solutions

Question 1.

- i. 25, 40
- ii. 56, 32
- iii. 40, 60, 75
- iv. 16, 27
- v. 18, 32, 48
- vi. 105, 154
- vii. 42, 45, 48
- viii. 57, 75, 102
- ix. 56, 57
- x. 777, 315, 588

Solution:

- i. 25, 40

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

5	25	2	40
5	5	2	20
	1	2	10
		5	5
			1

$$\therefore 25 = 5 \times 5$$

$$40 = 2 \times 2 \times 2 \times 5$$

$$\therefore \text{HCF of 25 and 40} = 5$$

ii. 56, 32

2	56	2	32
2	28	2	16
2	14	2	8
7	7	2	4
	1	2	2
			1

$$\therefore 56 = 2 \times 2 \times 2 \times 7$$

$$32 = 2 \times 2 \times 2 \times 2 \times 2$$

$$\therefore \text{HCF of 56 and 32} = 2 \times 2 \times 2$$

$$\therefore \text{HCF of 56 and 32} = 8$$

iii. 40, 60, 75

2	40	2	60	3	75
2	20	2	30	5	25
2	10	3	15	5	5
5	5	5	5		1
	1		1		

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

$$\therefore 40 = 2 \times 2 \times 2 \times 5$$

$$60 = 2 \times 2 \times 3 \times 5$$

$$75 = 3 \times 5 \times 5$$

$$\therefore \text{HCF of } 40, 60 \text{ and } 75 = 5$$

iv. 16, 27

2	16	3	27
2	8	3	9
2	4	3	3
2	2		1
	1		

$$\therefore 16 = 2 \times 2 \times 2 \times 2 \times 1$$

$$27 = 3 \times 3 \times 3 \times 1$$

$$\therefore \text{HCF of } 16 \text{ and } 27 = 1$$

v. 18, 32, 48

2	18	2	32	2	48
3	9	2	16	2	24
3	3	2	8	2	12
	1	2	4	2	6
		2	2	3	3
			1		1

$$\therefore 18 = 2 \times 3 \times 3$$

$$32 = 2 \times 2 \times 2 \times 2 \times 2$$

$$48 = 2 \times 2 \times 2 \times 2 \times 3$$

$$\therefore \text{HCF of } 18, 32 \text{ and } 48 = 2$$

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

vi. 105, 154

3	105	2	154
5	35	7	77
7	7	11	11
	1		1

$$\therefore 105 = 3 \times 5 \times 7$$

$$154 = 2 \times 2 \times 11$$

$$\therefore \text{HCF of 105 and 154} = 7$$

vii. 42, 45, 48

2	42	3	45	2	48
3	21	3	15	2	24
7	7	5	5	2	12
	1		1	2	6
				3	3
					1

$$\therefore 42 = 2 \times 3 \times 7$$

$$45 = 3 \times 3 \times 5$$

$$48 = 2 \times 2 \times 2 \times 2 \times 3$$

$$\therefore \text{HCF of 42, 45 and 48} = 3$$

viii. 57, 75, 102

3	57	3	75	2	102
19	19	5	25	3	51
	1	5	5	17	17
			1		1

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

$$\therefore 57 = 3 \times 19$$

$$75 = 3 \times 5 \times 5$$

$$102 = 2 \times 3 \times 17$$

$$\therefore \text{HCF of } 57, 75 \text{ and } 102 = 3$$

ix. 56, 57

2	56	3	57
2	28	19	19
2	14		1
7	7		
	1		

$$\therefore 56 = 2 \times 2 \times 2 \times 7 \times 1$$

$$57 = 3 \times 19 \times 1$$

$$\therefore \text{HCF of } 56 \text{ and } 57 = 1$$

x. 777, 315, 588

3	777	3	315	2	588
7	259	3	105	2	294
37	37	5	35	3	147
	1	7	7	7	49
			1	7	7
					1

$$\therefore 777 = 3 \times 7 \times 37$$

$$315 = 3 \times 3 \times 5 \times 7$$

$$588 = 2 \times 2 \times 3 \times 7 \times 7$$

$$\therefore \text{HCF of } 777, 315 \text{ and } 588 = 3 \times 7$$

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

HCF of 777, 315 and 588 = 21

Question 2.

Find the HCF by the division method and reduce to the simplest form:

i. 275525

ii. 76133

iii. 16169

Solution:

i. 275525

$$\begin{array}{r} 275 \overline{) 525} \quad (1 \\ - 275 \\ \hline 250 \overline{) 275} \quad (1 \\ - 250 \\ \hline 25 \overline{) 250} \quad (10 \\ - 250 \\ \hline 0 \end{array}$$

HCF of 275 and 525 = 25

$$\frac{275}{525} = \frac{275 \div 25}{525 \div 25} = \frac{11}{21}$$

ii. 76133

$$\begin{array}{r}
 76 \overline{) 133} \quad (1 \\
 \underline{- 76} \\
 57 \overline{) 76} \quad (1 \\
 \underline{- 57} \\
 19 \overline{) 57} \quad (3 \\
 \underline{- 57} \\
 0
 \end{array}$$

HCF of 76 and 133 = **19**

$$\frac{76}{133} = \frac{76 \div 19}{133 \div 19} = \frac{4}{7}$$

iii. 16169

$$\begin{array}{r}
 69 \overline{) 161} \quad (2 \\
 \underline{- 138} \\
 23 \overline{) 69} \quad (3 \\
 \underline{- 69} \\
 0
 \end{array}$$

HCF of 161 and 69 = **23**

$$\frac{161}{69} = \frac{161 \div 23}{69 \div 23} = \frac{7}{3}$$

Intext Questions and Activities

Question 1.

In each of the following examples, write all the factors of the numbers and find the greatest common divisor. (Textbook pg. no. 17)

i. 28, 42

ii. 51, 27

iii. 25, 15, 35

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

Solution:

i. Factors of 28 = 1, 2, 4, 7, 14, 28

Factors of 42 = 1, 2, 3, 6, 7, 14, 21, 42

$\therefore$ HCF of 28 and 42 = 14

ii. Factors of 51 = 1, 3, 17, 51

Factors of 27 = 1, 3, 9, 27

$\therefore$ HCF of 51 and 27 = 3

iii. Factors of 25 = 1, 5, 25

Factors of 15 = 1, 3, 5, 15

Factors of 35 = 1, 5, 7, 35

$\therefore$ HCF of 25, 15 and 35 = 5



Maharashtra Board Solutions

Class 7 Maths

- Chapter 1- Geometrical Constructions (Practice Set 1)
- Chapter 1- Geometrical Constructions (Practice Set 2)
- Chapter 1- Geometrical Constructions (Practice Set 3)
- Chapter 1- Geometrical Constructions (Practice Set 4)
- Chapter 1- Geometrical Constructions (Practice Set 5)
- Chapter 1- Geometrical Constructions (Practice Set 6)
- Chapter 1- Geometrical Constructions (Practice Set 7)
- Chapter 2- Multiplication and Division of Integers (Practice Set 8)
- Chapter 2- Multiplication and Division of Integers (Practice Set 9)
- Chapter 3- HCF and LCM (Practice Set 10)
- Chapter 3- HCF and LCM (Practice Set 11)
- Chapter 3- HCF and LCM (Practice Set 12)
- Chapter 3- HCF and LCM (Practice Set 13)
- Chapter 3- HCF and LCM (Practice Set 14)
- Chapter 4- Angles and Pairs of Angles (Practice Set 15)
- Chapter 4- Angles and Pairs of Angles (Practice Set 16)
- Chapter 4- Angles and Pairs of Angles (Practice Set 17)
- Chapter 4- Angles and Pairs of Angles (Practice Set 18)
- Chapter 4- Angles and Pairs of Angles (Practice Set 19)
- Chapter 4- Angles and Pairs of Angles (Practice Set 20)
- Chapter 4- Angles and Pairs of Angles (Practice Set 21)

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

- Chapter 5- Operations on Rational Numbers (Practice Set 22)
- Chapter 5- Operations on Rational Numbers (Practice Set 23)
- Chapter 5- Operations on Rational Numbers (Practice Set 24)
- Chapter 5- Operations on Rational Numbers (Practice Set 25)
- Chapter 6- Indices (Practice Set 26)
- Chapter 6- Indices (Practice Set 27)
- Chapter 6- Indices (Practice Set 28)
- Chapter 6- Indices (Practice Set 29)
- Chapter 6- Indices (Practice Set 30)
- Chapter 7- Joint Bar Graph (Practice Set 31)
- Chapter 8- Algebraic Expressions and Operations on them (Practice Set 32)
- Chapter 8- Algebraic Expressions and Operations on them (Practice Set 33)
- Chapter 8- Algebraic Expressions and Operations on them (Practice Set 34)
- Chapter 8- Algebraic Expressions and Operations on them (Practice Set 35)
- Chapter 8- Algebraic Expressions and Operations on them (Practice Set 36)
- Chapter 9- Direct Proportion and Inverse Proportion (Practice Set 37)
- Chapter 9- Direct Proportion and Inverse Proportion (Practice Set 38)
- Chapter 9- Direct Proportion and Inverse Proportion (Practice Set 39)
- Chapter 10- Bank and Simple Interest (Practice Set 40)
- Chapter 10- Bank and Simple Interest (Practice Set 41)
- Chapter 11- Circle (Practice Set 42)

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

- Chapter 11- Circle (Practice Set 43)
- Chapter 12- Perimeter and Area (Practice Set 44)
- Chapter 12- Perimeter and Area (Practice Set 45)
- Chapter 12- Perimeter and Area (Practice Set 46)
- Chapter 12- Perimeter and Area (Practice Set 47)
- Chapter 13- Pythagoras Theorem (Practice Set 48)
- Chapter 13- Pythagoras Theorem (Practice Set 49)
- Chapter 14- Algebraic Formulae - Expansion of Squares (Practice Set 50)
- Chapter 14- Algebraic Formulae - Expansion of Squares (Practice Set 51)
- Chapter 14- Algebraic Formulae - Expansion of Squares (Practice Set 52)
- Chapter 14- Algebraic Formulae - Expansion of Squares (Practice Set 53)
- Chapter 15- Statistics (Practice Set 54)
- Chapter 14- Statistics (Practice Set 55)

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

About About Maharashtra State Board (MSBSHSE)

The Maharashtra State Board of Secondary and Higher Secondary Education or MSBSHSE (Marathi: महाराष्ट्र राज्य माध्यमिक आणि उच्च माध्यमिक शिक्षण मंडळ), is an **autonomous and statutory body established in 1965**. The board was amended in the year 1977 under the provisions of the Maharashtra Act No. 41 of 1965.

The Maharashtra State Board of Secondary & Higher Secondary Education (MSBSHSE), Pune is an independent body of the Maharashtra Government. There are more than 1.4 million students that appear in the examination every year. The Maha State Board conducts the board examination twice a year. This board conducts the examination for SSC and HSC.

The Maharashtra government established the Maharashtra State Bureau of Textbook Production and Curriculum Research, also commonly referred to as Ebalbharati, in 1967 to take up the responsibility of providing quality textbooks to students from all classes studying under the Maharashtra State Board. MSBHSE prepares and updates the curriculum to provide holistic development for students. It is designed to tackle the difficulty in understanding the concepts with simple language with simple illustrations. Every year around 10 lakh students are enrolled in schools that are affiliated with the Maharashtra State Board.

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

FAQs

Where do I get the Maharashtra State Board Books PDF For free download?

You can download the Maharashtra State Board Books from the eBalbharti official website, i.e. cart.ebalbharati.in or from this article.

Add image

How to Download Maharashtra State Board Books?

Students can get the Maharashtra Books for primary, secondary, and senior secondary classes from here. You can view or download the Maharashtra State Board Books from this page or from the official website for free of cost. Students can follow the detailed steps below to visit the official website and download the e-books for all subjects or a specific subject in different mediums.

Step 1: Visit the official website ebalbharati.in

Step 2: On the top of the screen, select "Download PDF textbooks"

Step 3: From the "Classes" section, select your class.

Step 4: From "Medium", select the medium suitable to you.

Step 5: All Maharashtra board books for class 11th will now be displayed on the right side.

Step 6: Click on the "Download" option to download the PDF book.

Who developed the Maharashtra State board books?

As of now, the MSCERT and Balbharti are responsible for the syllabus and textbooks of Classes 1 to 8, while Classes 9 and 10 are under the Maharashtra State Board of Secondary and Higher Secondary Education (MSBSHSE).

How many state boards are there in Maharashtra?

The Maharashtra State Board of Secondary & Higher Secondary Education, conducts the HSC and SSC Examinations in the state of Maharashtra through its nine Divisional Boards located at Pune, Mumbai, Aurangabad, Nasik, Kolhapur, Amravati, Latur, Nagpur and Ratnagiri.

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>

About IndCareer

IndCareer.com is a leading developer of online career guidance resources for the Indian marketplace. Established in 2007, IndCareer.com is currently used by over thousands of institutions across India, including schools, employment agencies, libraries, colleges and universities.

IndCareer.com is designed to assist you in making the right career decision - a decision that meets your unique interests and personality.

For any clarifications or questions you can write to **info@indcareer.com**

Postal Address

IndCareer.com
52, Shilpa Nagar,
Somalwada
Nagpur - 440015
Maharashtra, India

WhatsApp: +91 9561 204 888

Website: <https://www.indcareer.com>

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-12-chapter-3-hcf-and-lcm/>