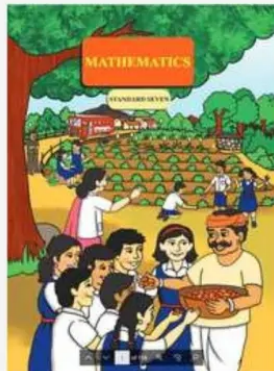


Maharashtra Board Solutions Class 7-Maths

(Practice Set 6): Chapter 1- Geometrical Constructions

BOOK SOLUTIONS
CLASS 7
MATHS

CHAPTER 1
Geometrical Constructions



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-6-chapter-1-geometrical-constructions/>



Maharashtra Board Solutions Class 7-Maths

(Practice Set 6): Chapter 1- Geometrical Constructions

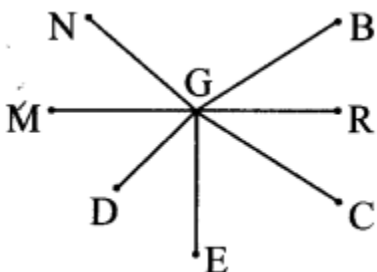
Class 7: Maths Chapter 1 solutions. Complete Class 7 Maths Chapter 1 Notes.

Maharashtra Board Solutions Class 7-Maths (Practice Set 6): Chapter 1- Geometrical Constructions

Maharashtra Board 7th Maths Chapter 1, Class 7 Maths Chapter 1 solutions

Question 1.

Write the names of pairs of congruent line segments. (Use a divider to find them.)



i. ____

ii. ____

iii. ____

iv. ____

Solution:

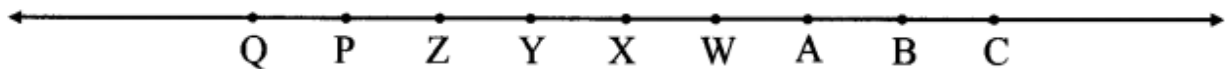
i. $\text{seg BG} \cong \text{seg CG}$

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-6-chapter-1-geometrical-constructions/>

ii. $\text{seg NG} \cong \text{seg MG} \cong \text{seg EG} \cong \text{seg RG}$

Question 2.

On the line below, the distance between any two adjoining points shown on it is equal. Hence, fill in the blanks.



i. $\text{seg AB} \cong \text{seg } \underline{\hspace{1cm}}$

ii. $\text{seg AP} \cong \text{seg } \underline{\hspace{1cm}}$

iii. $\text{seg AC} \cong \text{seg } \underline{\hspace{1cm}}$

iv. $\text{seg } \underline{\hspace{1cm}} \cong \text{seg BY}$

v. $\text{seg } \underline{\hspace{1cm}} \cong \text{seg YQ}$

vi. $\text{seg BW} \cong \text{seg } \underline{\hspace{1cm}}$

Solution:

i. BC

ii. QW

iii. QZ

iv. AZ

v. AY

vi. AC

Note: The above problem has many solutions. Students may write solutions other than the ones given.

Intext Questions and Activities

Question 1.

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-6-chapter-1-geometrical-constructions/>

Try to draw triangles with the following data. Can you draw these triangles. If not, look for the reason why you could not draw so. (Textbook pg. no. 7)

i. $\triangle ABC$ in which $m\angle A = 85^\circ$, $m\angle B = 115^\circ$, $l(AB) = 5\text{cm}$.

Solution:

$$m\angle A + m\angle B = 85^\circ + 115^\circ$$

$$= 200^\circ > 180^\circ$$

But the sum of the measures of the angles of a triangle is 180°

Hence, $\triangle ABC$ cannot be drawn.

ii. $\triangle PQR$ in which $l(QR) = 2\text{cm}$, $l(PQ) = 4\text{cm}$, $l(PR) = 2\text{cm}$.

Solution:

$$l(QR) + l(PR) = 2\text{ cm} + 2\text{cm}$$

$$= 4\text{ cm}$$

$$= l(PQ)$$

But in a triangle, the sum of the length of any two sides of a triangle is always greater than the length of the third side.

Hence, $\triangle PQR$ cannot be drawn.

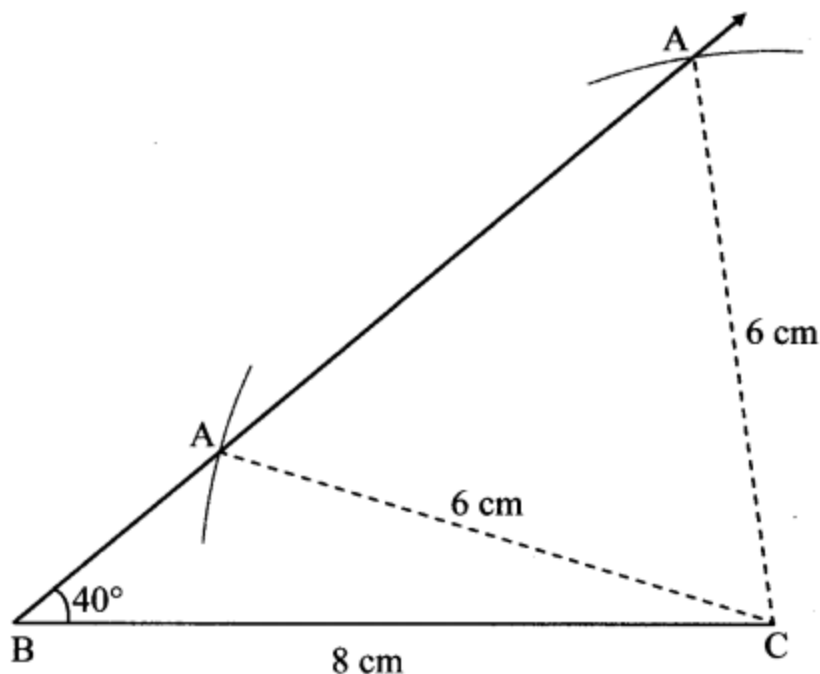
Question 2.

Draw $\triangle ABC$ such that $l(BC) = 8\text{ cm}$, $l(CA) = 6\text{ cm}$, $m\angle ABC = 40^\circ$.

Draw a ray to make an angle of 40° with the base BC , $l(BC) = 8\text{ cm}$. We have to obtain point 'A' on the ray. With 'C' as the centre, draw an arc of radius 6 cm to do so. What do we observe? The arc intersects the ray in two different points. Thus, we get two triangles of two different shapes having the given measures. (Textbook pg. no. 7)

Solution:

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-6-c-hapter-1-geometrical-constructions/>



Here $\angle B$ is an acute angle. $\angle C$ can be an acute angle or an obtuse angle.

Hence we get two triangles of two different shapes.

Question 3.

Can a triangle be drawn if the three angles are given, but not any side? How many such triangles can be drawn? (Textbook pg. no. 7)

Solution:

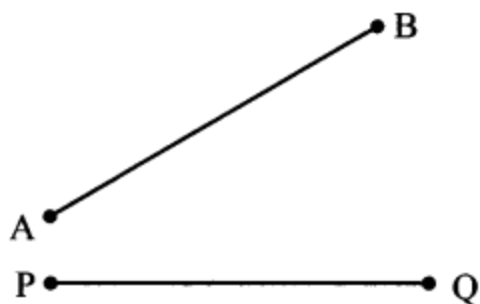
Yes a triangle can be drawn.

Since the length of side is not given, any length of side can be selected and then triangle can be constructed. We will get different triangles for different length of sides.

Question 4.

Using the ruler, measure the lengths of seg AB and seg PQ. Are they of same length? Trace the seg AB on a sheet of transparent paper. Now place this new segment on PQ verify that if point A is placed on point P, then B falls on Q. (Textbook pg. no. 7)

<https://www.indcareer.com/schools/maharashtra-board-solutions-class-7-maths-practice-set-6-chapter-1-geometrical-constructions/>



$$l(AB) = \underline{\hspace{1cm}}$$

$$l(PQ) = \underline{\hspace{1cm}}$$

Solution:

$$l(AB) = 4 \text{ cm}$$

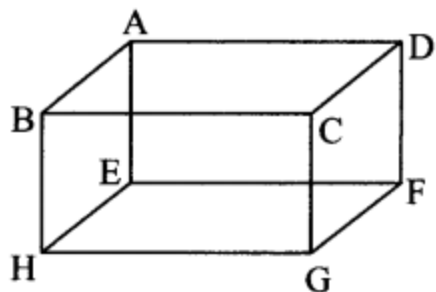
$$l(PQ) = 4 \text{ cm}$$

Since the length of two segments is the same, if placed on one another, they will coincide.

Question 5.

**From the shape shown below, write the names of the pairs of congruent line segments.
(Textbook pg. no. 8)**

- i. $\text{seg } AB \cong \text{seg } DC$
- ii. $\text{seg } AE \cong \text{seg } BH$
- iii. $\text{seg } EF \cong \text{seg } \underline{\hspace{1cm}}$
- iv. $\text{seg } DF \cong \text{seg } \underline{\hspace{1cm}}$



Solution:

$\text{seg EF} \cong \text{seg AD} \cong \text{seg BC} \cong \text{seg HG}$

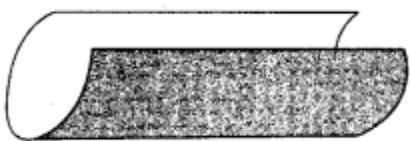
$\text{seg DF} \cong \text{seg CG} \cong \text{seg AE} \cong \text{seg BH}$

Question 6.

Take a rectangular paper. Place two opposite sides upon each Other. What do you observe? (Textbook pg. no. 7)

Solution:

Opposite sides of the rectangular paper coincide and hence are congruent.



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-6-c-hapter-1-geometrical-constructions/>

- 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-6-chapter-1-geometrical-constructions/>

- 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-6-c-hapter-1-geometrical-constructions/>

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-6-c-hapter-1-geometrical-constructions/>

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-6-c-hapter-1-geometrical-constructions/>

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-6-c-hapter-1-geometrical-constructions/>