

NCERT Solutions for Class 10 Maths Chapter 8

Introduction to Trigonometry

[NCERT Solutions for Class 10 Maths](#)

Chapter 8 Introduction to Trigonometry

NCERT Solutions for Class 10 Maths Chapter 8 Introduction to Trigonometry Exercise 8.1

Page No: 181

Question 1. In $\triangle ABC$, right-angled at B, $AB = 24$ cm, $BC = 7$ cm. Determine :

(i) $\sin A$, $\cos A$

(ii) $\sin C$, $\cos C$

Solution:

In $\triangle ABC$ by applying Pythagoras theorem

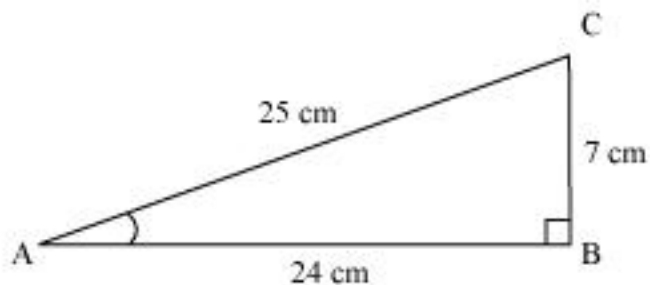
$$AC^2 = AB^2 + BC^2$$

$$= (24)^2 + (7)^2$$

$$= 576 + 49$$

$$= 625$$

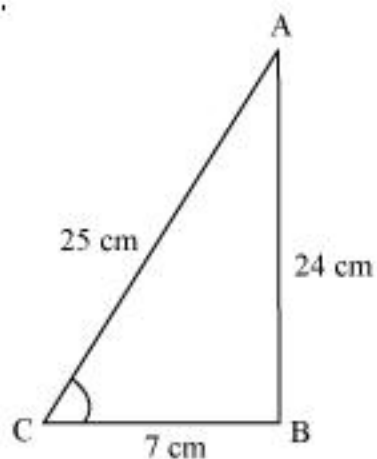
$$AC = \sqrt{625} = 25 \text{ cm}$$



$$(i). \quad \sin A = \frac{\text{Side opposite to } \angle A}{\text{hypotenuse}} = \frac{BC}{AC} = \frac{7}{25}$$

$$\cos A = \frac{\text{Side adjacent to } \angle A}{\text{hypotenuse}} = \frac{AB}{AC} = \frac{24}{25}$$

(ii).



$$\sin C = \frac{\text{Side opposite to } \angle C}{\text{hypotenuse}} = \frac{AB}{AC}$$

<https://www.scribd.com/document/385558522/NCERT-Solutions-for-Class-10-Maths-Chapter-8-Introduction-to-Trigonometry-1>
<https://drive.google.com/drive/folders/1F8hZrYJJwna00Xg2tkgPQSiao4p3f1J->