RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8: RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8 helps you understand how angles that add up to 90 degrees, known as complementary angles, relate to trigonometric ratios like sine, cosine, and tangent.

By practicing these exercises, you'll learn how these ratios work for such angles and improve your ability to solve related problems.

These solutions help students practice and learn the trigonometric ratios well, building a strong base for future math topics. By working through these problems, students can improve their math skills and gain confidence.

RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8 Overview

These solutions for Class 10 Maths Chapter 8 Exercise 8 have been created by subject experts from Physics Wallah. They help students understand trigonometric ratios for complementary angles effectively.

These solutions are designed to improve understanding and mastery of concepts, ensuring students are well-prepared for exams and can apply trigonometric functions accurately to angles that add up to 90 degrees.

RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8 PDF

The RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8 PDF provide detailed solutions for understanding trigonometric ratios of complementary angles. These experts ensure that the solutions are easy to understand, helping students grasp the concepts of angles such as 0°, 30°, 45°, 60°, and 90° thoroughly.

This resource is important for students looking to strengthen their grasp of trigonometry concepts.

RS Aggarwal Solutions for Class 10 Maths Chapter 8 Trigonometric Ratios of Complementary Angles Exercise 8

Here we have provided RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8 for the ease of students so that they can prepare better for their exams.

Q. Without using trigonometric tables, evaluate:

(i) $\frac{\sin 16^\circ}{\cos 74^\circ}$ (ii) $\frac{\sec 11^\circ}{\text{cosec } 79^\circ}$ (iii) $\frac{\tan 27^\circ}{\cot 63^\circ}$

(iv) $\frac{\cos 35^\circ}{\sin 55^\circ}$ (v) $\frac{\text{cosec } 45^\circ}{\sec 48^\circ}$ (vi) $\frac{\cot 38^\circ}{\tan 52^\circ}$

Solution:

(i)

$$\frac{\sin 16^\circ}{\cos 74^\circ} = \frac{\sin(90^\circ - 74^\circ)}{\cos 74^\circ} = \frac{\cos 74^\circ}{\cos 74^\circ} = 1$$

$$[\because \sin(90^\circ - \theta) = \cos\theta]$$

(ii)

$$\frac{\sec 11^\circ}{\text{cosec} 79^\circ} = \frac{\sec(90^\circ - 79^\circ)}{\text{cos ec} 79^\circ} = \frac{\text{cos ec} 79^\circ}{\text{cos ec} 79^\circ} = 1$$

(iii)

$$\frac{\tan 27^\circ}{\cot 63^\circ} = \frac{\tan(90^\circ - 63^\circ)}{\cot 63^\circ} = \frac{\cot 63^\circ}{\cot 63^\circ} = 1$$

$$[\because \tan(90^\circ - \theta) = \cot\theta]$$

(iv)

$$\frac{\cos 35^\circ}{\sin 55^\circ} = \frac{\cos 35^\circ}{\sin(90^\circ - 35^\circ)} = \frac{\cos 35^\circ}{\cos 35^\circ} = 1$$

(v)

$$\frac{\text{cos ec} 42^\circ}{\sec 48^\circ} = \frac{\text{cos ec} 42^\circ}{\sec(90^\circ - 42^\circ)} = \frac{\text{cos ec} 42^\circ}{\text{cos ec} 42^\circ} = 1$$

(vi)

$$\frac{\cot 38^\circ}{\tan 52^\circ} = \frac{\cot 38^\circ}{\tan(90^\circ - 38^\circ)} = \frac{\cot 38^\circ}{\cot 38^\circ} = 1$$

Q. Without using trigonometric tables, prove that:

(i) $\sin 53^\circ \cos 37^\circ + \cos 53^\circ \sin 37^\circ = 1$

(ii) $\cos 54^\circ \cos 36^\circ - \sin 54^\circ \sin 36^\circ = 0$

(iii) $\sec 70^\circ \sin 20^\circ + \cos 20^\circ \text{ cosec } 70^\circ = 2$

(iv) $\sin 35^\circ \sin 55^\circ - \cos 35^\circ \cos 55^\circ = 0$

(v) $(\sin 72^\circ + \cos 18^\circ)(\sin 72^\circ - \cos 18^\circ) = 0$

(vi) $\tan 48^\circ \tan 23^\circ \tan 42^\circ \tan 67^\circ = 1$

Solution:

(i) LHS = cos81° – sin9°
= cos(90° -9°)- sin9° = sin9° – sin9°
= 0 = RHS

(ii) LHS = tan71° – cot19°
=tan(90° – 19°) – cot19° =cot19° – cot19°
=0 = RHS

(iii) LHS = cosec80° – sec10°
= cosec(90° – 10°) – sec(10°)
= sec10° – sec10° = 0
= RHS

(iv) LHS = $\text{cosec}^2 72° - \tan^2 18°$

$= \text{cosec}^2(90° - 18°) - \tan^2 18°$

$= \sec^2 18° - \tan^2 18°$

$= 1 + \tan^2 18° - \tan^2 18°$

$\left[\because 1 + \tan^2 18° = \sec^2 18\right]$

$= 1 = \text{RHS}$

(v) LHS = $\cos^2 75° + \cos^2 15°$

$= \cos^2 (90° - 15°) + \cos^2 15$

$[\because \cos(90° - \theta) = \sin\theta]$

$= \sin^2 15° + \cos^2 15° = 1 = \text{RHS}$

(vi) LHS = $\tan^2 66° - \cot^2 24°$

$= \tan^2 66° - \cot^2 (90° - 66°)$

$[\because \cot(90° - \theta) = \tan\theta]$

$= \tan^2 66° - \tan^2 66° = 0 = \text{RHS}$

$\therefore$ LHS = RHS

(vii) LHS = $\sin^2 48° + \sin^2 42°$

$= \sin^2 48° + \sin^2 (90° - 48°) = \sin^2 48° + \cos^2 48°$

$= 1 = \text{RHS}$

$\therefore$ LHS = RHS

(viii) LHS = $\cos^2 57° - \sin^2 33°$

LHS $= \cos^2 75° - \sin^2 33°$

$= \cos^2 (90° - 33°) - \sin^2 33°$

$= \sin^2 33° - \sin^2 33° = 0 = \text{RHS}$

(ix) LHS = $(\sin 65° + \cos 25°)(\sin 65° - \cos 25°)$

$= \sin^2 65° - \cos^2 25°$

$= \sin^2 65° - \cos^2 (90° - 65°)$

$= \sin^2 65° - \sin^2 65° = 0 = \text{RHS}$

Q. Prove that:

(i) $\frac{\sin 70°}{\cos 20°} + \frac{\text{cosec } 20°}{\sec 70°} - 2\cos 70° \text{ cosec } 20° = 0$

(ii) $\frac{\cos 80°}{\sin 10°} + \cos 59° \text{ cosec } 31° = 2$

(iii) $\frac{2\sin 68°}{\cos 22°} - \frac{2\cot 15°}{5\tan 75°} - \frac{3\tan 45° \tan 20° \tan 40° \tan 50° \tan 70°}{5} = 1$

(iv) $\frac{\sin 18°}{\cos 72°} + \sqrt{3}(\tan 10° \tan 30° \tan 40° \tan 50° \tan 80°) = 2$

(v) $\frac{7\cos 55°}{3\sin 35°} - \frac{4(\cos 70° \text{ cosec } 20°)}{3(\tan 5° \tan 25° \tan 45° \tan 65° \tan 85°)} = 1$

Solution:

(i)

$$\begin{aligned}\text{L.H.S.} &= \sin 53^\circ \cos 37^\circ + \cos 53^\circ \sin 37^\circ \\ &= \sin 53^\circ \times \cos(90^\circ - 53^\circ) + \cos 53^\circ \times \sin(90^\circ - 53^\circ) \\ &= \sin 53^\circ \times \sin 53^\circ + \cos 53^\circ \times \cos 53^\circ \\ &= \sin^2 53^\circ + \cos^2 53^\circ \\ &= 1 \\ &= \text{R.H.S.}\end{aligned}$$

(ii)

$$\begin{aligned}\text{L.H.S.} &= \cos 54^\circ \cos 36^\circ - \sin 54^\circ \sin 36^\circ \\ &= \cos 54^\circ \cos 36^\circ - \sin(90^\circ - 36^\circ)\sin(90^\circ - 54^\circ) \\ &= \cos 54^\circ \cos 36^\circ - \cos 36^\circ \cos 54^\circ \\ &= 0 \\ &= \text{R.H.S.}\end{aligned}$$

(iii)

$$\begin{aligned}\text{L.H.S.} &= \sec 70^\circ \sin 20^\circ + \cos 20^\circ \operatorname{cosec} 70^\circ \\ &= \sec(90^\circ - 20^\circ)\sin 20^\circ + \cos 20^\circ \operatorname{cosec}(90^\circ - 20^\circ) \\ &= \operatorname{cosec} 20^\circ \sin 20^\circ + \cos 20^\circ \sec 20^\circ \\ &= \frac{1}{\sin 20^\circ} \times \sin 20^\circ + \cos 20^\circ \times \frac{1}{\cos 20^\circ} \\ &= 1 + 1 \\ &= 2 \\ &= \text{R.H.S.}\end{aligned}$$

(iv)

L.H.S. = $\sin 35° \sin 55° - \cos 35° \cos 55°$

$= \sin(90° - 55°)\sin(90° - 35°) - \cos 35° \cos 55°$

$= \cos 55° \cos 35° - \cos 35° \cos 55°$

$= 0$

= R.H.S.

(v)

L.H.S. = $(\sin 72° + \cos 18°)(\sin 72° - \cos 18°)$

$= \sin^2 72° - \cos^2 18°$

$= \sin^2 72° - \cos^2(90° - 72°)$

$= \sin^2 72° - \sin^2 72°$

$= 0$

= R.H.S.

(vi)

L.H.S. = $\tan 48° \tan 23° \tan 42° \tan 67°$

$= \tan 48° \tan 23° \tan(90° - 48°) \tan(90° - 23°)$

$= \tan 48° \tan 23° \cot 48° \cot 23°$

$= (\tan 48° \cot 48°)(\tan 23° \cot 23°)$

$= 1 \times 1$

$= 1$

= R.H.S.

Q. Prove that:

(i) $\sin\theta \cos(90° - \theta) + \sin(90° - \theta)\cos\theta = 1$

(ii) $\frac{\sin\theta}{\cos(90°-\theta)} + \frac{\cos\theta}{\sin(90°-\theta)} = 2$

(iii) $\frac{\sin\theta \cos(90°-\theta)\cos\theta}{\sin(90°-\theta)} + \frac{\cos\theta \sin(90°-\theta)\sin\theta}{\cos(90°-\theta)} = 1$

(iv) $\frac{\cos(90°-\theta)\sec(90°-\theta)\tan\theta}{\operatorname{cosec}(90°-\theta)\sin(90°-\theta)\cot(90°-\theta)} + \frac{\tan(90°-\theta)}{\cot\theta} = 2$

(v) $\frac{\cos(90°-\theta)}{1+\sin(90°-\theta)} + \frac{1+\sin(90°-\theta)}{\cos(90°-\theta)} = 2\operatorname{cosec}\theta$

(vi) $\frac{\sec(90°-\theta)\operatorname{cosec}\theta - \tan(90°-\theta)\cot\theta + \cos^2 25° + \cos^2 65°}{3\tan 27° \tan 63°} = \frac{2}{3}$

(vii) $\cot\theta \tan(90° - \theta) - \sec(90° - \theta)\operatorname{cosec}\theta + \sqrt{3}\tan 12° \tan 60° \tan 78° = 2$

Solution:

(i)

$$\text{L.H.S.} = \frac{\sin 70^\circ}{\cos 20^\circ} + \frac{\operatorname{cosec} 20^\circ}{\sec 70^\circ} - 2\cos 70^\circ \operatorname{cosec} 20^\circ$$

$$= \frac{\sin 70^\circ}{\cos(90^\circ - 70^\circ)} + \frac{\operatorname{cosec} 20^\circ}{\sec(90^\circ - 20^\circ)} - 2\cos 70^\circ \operatorname{cosec}(90^\circ - 70^\circ)$$

$$= \frac{\sin 70^\circ}{\sin 70^\circ} + \frac{\operatorname{cosec} 20^\circ}{\operatorname{cosec} 20^\circ} - 2\cos 70^\circ \sec 70^\circ$$

$$= 1 + 1 - 2\cos 70^\circ \times \frac{1}{\cos 70^\circ}$$

$$= 2 - 2 \times 1$$

$$= 2 - 2$$

$$= 0$$

$$= \text{R.H.S.}$$

(ii)

$$\text{L.H.S.} = \frac{\cos 80^\circ}{\sin 10^\circ} + \cos 59^\circ \ \text{cosec} 31^\circ$$

$$= \frac{\cos(90^\circ - 10^\circ)}{\sin 10^\circ} + \cos 59^\circ \ \text{cosec}(90^\circ - 59^\circ)$$

$$= \frac{\sin 10^\circ}{\sin 10^\circ} + \cos 59^\circ \ \sec 59^\circ$$

$$= 1 + \cos 59^\circ \times \frac{1}{\cos 59^\circ}$$

$$= 1 + 1$$

$$= 2$$

$= \text{R.H.S.}$

(iii)

$$\text{L.H.S.} = \frac{2\sin 68^\circ}{\cos 22^\circ} - \frac{2\cot 15^\circ}{5\tan 75^\circ} - \frac{3\tan 45^\circ \tan 20^\circ \tan 40^\circ \tan 50^\circ \tan 70^\circ}{5}$$

$$= \frac{2\sin(90^\circ - 22^\circ)}{\cos 22^\circ} - \frac{2\cot(90^\circ - 75^\circ)}{5\tan 75^\circ}$$

$$- \frac{3 \times 1 \times \tan 20^\circ \tan 40^\circ \tan(90^\circ - 40^\circ) \tan(90^\circ - 20^\circ)}{5}$$

$$= \frac{2\cos 22^\circ}{\cos 22^\circ} - \frac{2\tan 75^\circ}{5\tan 75^\circ} - \frac{3\tan 20^\circ \tan 40^\circ \cot 40^\circ \cot 20^\circ}{5}$$

$$= 2 - \frac{2}{5} - \frac{3(\tan 20^\circ \cot 20^\circ)(\tan 40^\circ \cot 40^\circ)}{5}$$

$$= 2 - \frac{2}{5} - \frac{3}{5}$$

$$= \frac{10 - 2 - 3}{5}$$

$$= \frac{5}{5}$$

$$= 1$$

$= \text{R.H.S.}$

(iv)

$$\text{L.H.S.} = \frac{\sin 18^\circ}{\cos 72^\circ} + \sqrt{3}\,(\tan 10^\circ \tan 30^\circ \tan 40^\circ \tan 50^\circ \tan 80^\circ)$$

$$= \frac{\sin(90^\circ - 72^\circ)}{\cos 72^\circ} + \sqrt{3}\,\left(\tan 10^\circ \times \frac{1}{\sqrt{3}} \tan 40^\circ \tan(90^\circ - 40^\circ)\tan(90 - 10^\circ)\right)$$

$$= \frac{\cos 72^\circ}{\cos 72^\circ} + \tan 10^\circ \tan 40^\circ \cot 40^\circ \cot 10^\circ$$

$$= 1 + (\tan 10^\circ \cot 10^\circ)(\tan 40^\circ \cot 40^\circ)$$

$$= 1 + 1$$

$$= 2$$

$$= \text{R.H.S.}$$

(v)

$$\text{L.H.S.} = \frac{7\cos 55^\circ}{3\sin 35^\circ} - \frac{4(\cos 70^\circ \operatorname{cosec} 20^\circ)}{3\,(\tan 5^\circ \tan 25^\circ \tan 45^\circ \tan 65^\circ \tan 85^\circ)}$$

$$= \frac{7\cos(90^\circ - 35^\circ)}{3\sin 35^\circ} - \frac{4[\cos 70^\circ \operatorname{cosec}(90^\circ - 70^\circ)]}{3\,(\tan 5^\circ \tan 25^\circ \times 1 \times \tan(90^\circ - 25^\circ)\tan(90^\circ - 5^\circ))}$$

$$= \frac{7\sin 35^\circ}{3\sin 35^\circ} - \frac{4[\cos 70^\circ \sec 70^\circ]}{3\,(\tan 5^\circ \tan 25^\circ \times 1 \times \cot 25^\circ \cot 5^\circ}$$

$$= \frac{7}{3} - \frac{4 \times \cos 70^\circ \times \frac{1}{\cos 70^\circ}}{3(\tan 5^\circ \cot 5^\circ)(\tan 25^\circ \cot 25^\circ)}$$

$$= \frac{7}{3} - \frac{4}{3}$$

$$= \frac{3}{3}$$

$$= 1$$

$$= \text{R.H.S.}$$

Q. Prove that:

(i) $\sin\theta \cos(90^\circ - \theta) + \sin(90^\circ - \theta)\cos\theta = 1$

(ii) $\frac{\sin\theta}{\cos(90^\circ-\theta)} + \frac{\cos\theta}{\sin(90^\circ-\theta)} = 2$

(iii) $\frac{\sin\theta\cos(90^\circ-\theta)\cos\theta}{\sin(90^\circ-\theta)} + \frac{\cos\theta\sin(90^\circ-\theta)\sin\theta}{\cos(90^\circ-\theta)} = 1$

(iv) $\frac{\cos(90^\circ-\theta)\sec(90^\circ-\theta)\tan\theta}{\operatorname{cosec}(90^\circ-\theta)\sin(90^\circ-\theta)\cot(90^\circ-\theta)} + \frac{\tan(90^\circ-\theta)}{\cot\theta} = 2$

Solution:

(i)

$$\text{L.H.S.} = \sin\theta\cos(90° - \theta) + \sin(90° - \theta)\cos\theta$$
$$= \sin\theta\sin\theta + \cos\theta\cos\theta$$
$$= \sin^2\theta + \cos^2\theta$$
$$= 1$$
$$= \text{R.H.S.}$$

(ii)

$$\text{L.H.S.} = \frac{\sin\theta}{\cos(90° - \theta)} + \frac{\cos\theta}{\sin(90° - \theta)}$$
$$= \frac{\sin\theta}{\sin\theta} + \frac{\cos\theta}{\cos\theta}$$
$$= 1 + 1$$
$$= 2$$
$$= \text{R.H.S.}$$

(iii)

$$\text{L.H.S.} = \frac{\sin\theta\cos(90^\circ-\theta)\cos\theta}{\sin(90^\circ-\theta)} + \frac{\cos\theta\,\sin\,(90^\circ-\theta)\sin\theta}{\cos\,(90^\circ-\theta)}$$

$$= \frac{\sin\theta\sin\theta\cos\theta}{\cos\theta} + \frac{\cos\theta\,\cos\theta\sin\theta}{\sin\theta}$$

$$= \sin^2\theta + \cos^2\theta$$

$$= 1$$

$$= \text{R.H.S.}$$

(iv)

$$\text{L.H.S.} = \frac{\cos(90^\circ-\theta)\sec(90^\circ-\theta)\tan\theta}{\text{cosec}(90^\circ-\theta)\sin(90^\circ-\theta)\cot(90^\circ-\theta)} + \frac{\tan(90^\circ-\theta)}{\cot\theta}$$

$$= \frac{\sin\theta\,\text{cosec}\theta\tan\theta}{\sec\theta\cos\theta\tan\theta} + \frac{\cot\theta}{\cot\theta}$$

$$= \frac{\sin\theta \times \frac{1}{\sin\theta}}{\frac{1}{\cos\theta} \times \cos\theta} + 1$$

$$= \frac{1}{1} + 1$$

$$= 1 + 1$$

$$= 2$$

$$= \text{R.H.S.}$$

Q. Prove that:

(i) $\tan 5^\circ \tan 25^\circ \tan 30^\circ \tan 65^\circ \tan 85^\circ = \frac{1}{\sqrt{3}}$

(ii) $\cot 12^\circ \cot 38^\circ \cot 52^\circ \cot 60^\circ \cot 78^\circ = \frac{1}{\sqrt{3}}$

(iii) $\cos 15^\circ \cos 35^\circ \text{cosec } 55^\circ \cos 60^\circ \text{cosec } 75^\circ = \frac{1}{2}$

(iv) $\cos 1^\circ \cos 2^\circ \cos 3^\circ \ldots \cos 180^\circ = 0$

(v) $\left(\frac{\sin 49^\circ}{\cos 41^\circ}\right)^2 + \left(\frac{\cos 41^\circ}{\sin 49^\circ}\right)^2 = 2$

Solution:

(i)

L.H.S. = tan 5° tan 25° tan 30° tan 65° tan 85°

$= \tan 5° \tan 25° \times \frac{1}{\sqrt{3}} \times \tan(90° - 25°)\tan(90° - 5°)$

$= \tan 5° \tan 25° \times \frac{1}{\sqrt{3}} \times \cot 25° \cot 5°$

$= (\tan 5° \cot 5°)(\tan 25° \cot 25°) \times \frac{1}{\sqrt{3}}$

$= 1 \times \frac{1}{\sqrt{3}}$

$= \frac{1}{\sqrt{3}}$

= R.H.S.

(ii)

$$\begin{aligned}
\text{L.H.S.} &= \cot 12^\circ \cot 38^\circ \cot 52^\circ \cot 60^\circ \cot 78^\circ \\
&= \cot 12^\circ \cot 38^\circ \cot(90^\circ - 38^\circ) \times \frac{1}{\sqrt{3}} \times \cot(90^\circ - 12^\circ) \\
&= \cot 12^\circ \cot 38^\circ \tan 38^\circ \times \frac{1}{\sqrt{3}} \times \tan 12^\circ \\
&= (\cot 12^\circ \tan 12^\circ)(\cot 38^\circ \tan 38^\circ) \times \frac{1}{\sqrt{3}} \\
&= 1 \times \frac{1}{\sqrt{3}} \\
&= \frac{1}{\sqrt{3}} \\
&= \text{R.H.S.}
\end{aligned}$$

(iii)

$$\begin{aligned}
\text{L.H.S.} &= \cos 15^\circ \cos 35^\circ \operatorname{cosec} 55^\circ \cos 60^\circ \operatorname{cosec} 75^\circ \\
&= \cos 15^\circ \cos 35^\circ \operatorname{cosec}(90^\circ - 35^\circ) \times \frac{1}{2} \operatorname{cosec}(90^\circ - 15^\circ) \\
&= \cos 15^\circ \cos 35^\circ \sec 35^\circ \times \frac{1}{2} \sec 15^\circ \\
&= \cos 15^\circ \cos 35^\circ \times \frac{1}{\cos 35^\circ} \times \frac{1}{2} \times \frac{1}{\cos 15^\circ} \\
&= \frac{1}{2} \\
&= \text{R.H.S.}
\end{aligned}$$

(iv)

$$\begin{aligned}
\text{L.H.S.} &= \cos 1^\circ \cos 2^\circ \cos 3^\circ \ldots \cos 180^\circ \\
&= \cos 1^\circ \cos 2^\circ \cos 3^\circ \ldots \cos 90^\circ \ldots \cos 180^\circ \\
&= \cos 1^\circ \cos 2^\circ \cos 3^\circ \ldots \times 0 \times \ldots \cos 180^\circ \quad (\text{Since } \cos 90^\circ = 0) \\
&= 0 \\
&= \text{R.H.S.}
\end{aligned}$$

(v)

$$\text{L.H.S.} = \left(\frac{\sin 49^\circ}{\cos 41^\circ}\right)^2 + \left(\frac{\cos 41^\circ}{\sin 49^\circ}\right)^2$$

$$= \left(\frac{\sin(90^\circ - 41^\circ)}{\cos 41^\circ}\right)^2 + \left(\frac{\cos(90^\circ - 49^\circ)}{\sin 49^\circ}\right)^2$$

$$= \left(\frac{\cos 41^\circ}{\cos 41^\circ}\right)^2 + \left(\frac{\sin 49^\circ}{\sin 49^\circ}\right)^2$$

$$= 1^2 + 1^2$$

$$= 1 + 1$$

$$= 2$$

$$= \text{R.H.S.}$$

Note : Question Modified

Benefits of RS Aggarwal Solutions for Class 10 Maths Chapter 8 Exercise 8

Clarity in Concepts: They provide clear explanations and step-by-step solutions, helping students understand the concepts of trigonometric ratios of complementary angles better.

Self-Assessment: Students can use the solutions to self-assess their understanding and identify areas for improvement.

Expert Guidance: Prepared by subject experts from Physics Wallah these solutions ensure accuracy and adherence to the latest syllabus, providing reliable guidance to students.

Confidence Building: Regular practice with these solutions can boost students confidence in their ability to tackle trigonometric problems, leading to better performance in exams.

Accessibility: The solutions are available in a convenient PDF format, allowing students to access them easily and study at their own pace.

Foundation for Advanced Topics: Understanding these fundamental trigonometric ratios is important for more advanced topics in mathematics, making these solutions a crucial part of a student's mathematical education.