



#04 SA Trigonometric Functions

Total points

5/5



✓ Q1. *

1/1

$$\cos 6x - \cos 8x = \text{-----}$$

$$2 \cos 7x \cos x$$

Option 1

$$-2 \cos 7x \cos x$$

Option 2

$$2 \sin 7x \sin x$$

Option 3 ✓

$$-2 \sin 7x \sin x$$

Option 4

✓ Q2. *

1/1

$$\frac{\sin A + \sin 3A}{\cos A - \cos 3A} = \text{-----}$$

tan A

cot A ✓

sec A

sec A

cosec A

✓ Q3.*

1/1

If $A + B = \frac{\pi}{3}$ and $\cos A + \cos B = 1$, then find the value of $\cos \frac{A - B}{2}$.

1

Option 1

$\sqrt{3}$

Option 2

$\frac{1}{2}$

Option 3

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

Option 4



Feedback

See the solution, is this what you did?

[Solution](#)

✓ Q4 : Simplify the following

1/1

$$\sqrt{2(1 + \cos 4\theta)}$$

$$2 \cos \theta$$

Option 1

$$2 \sin \theta$$

Option 2

$$2 \cos 2\theta$$

Option 3



$$2 \sin 2\theta$$

Option 4



If $\cos x = -\frac{1}{3}$ and x lies in Quadrant III, find the value of $\sin\left(\frac{x}{2}\right)$

$$\frac{\sqrt{6}}{3}$$

Option 1



$$-\frac{\sqrt{6}}{3}$$

Option 2

$$-\frac{\sqrt{3}}{3}$$

Option 3

$$\frac{\sqrt{3}}{3}$$

Option 4

