#04 SA Trigonometric Functions

Total points 5/5

The respondent's email (**8608@sanskritischool.edu.in**) was recorded on submission of this form.

Name *

Jaskirat

Section *

- [ ] A
- [ ] B
- [ ] C
- [ ] D
- [x] E
- [ ] F
- [ ] GHI

✓ Q1. * 1/1

$\cos 6x - \cos 8x = \_\_\_\_\_$

$2\cos 7x \cos x$

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

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

tan A

cot 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

✓ Q5 *

1/1

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