



Trigonometry Identities - Sum to Product Identity True/False (Greek Letter)

1 Is this sum to product identity correct?

$$\cos(\beta) - \cos(\theta) = -2\sin\left(\frac{(\beta + \theta)}{2}\right)\sin\left(\frac{(\beta - \theta)}{2}\right)$$

A
Yes

B
No

2 Is this sum to product identity correct?

$$\sin(\beta) + \sin(\alpha) = \sin\left(\frac{2}{(\beta + \alpha)}\right)\sin\left(\frac{(\beta - \alpha)}{2}\right)$$

A
Yes

B
No

3 Is this sum to product identity correct?

$$\cos(\gamma) - \cos(\beta) = -2\sin\left(\frac{(\gamma + \beta)}{2}\right)\sin\left(\frac{(\gamma - \beta)}{2}\right)$$

A
Yes

B
No

4 Is this sum to product identity correct?

$$\sin(\theta) - \sin(\gamma) = 2\cos\left(\frac{(\theta + \gamma)}{2}\right) - \sin\left(\frac{(\theta + \gamma)}{2}\right)$$

A
Yes

B
No

5 Is this sum to product identity correct?

$$\sin(\beta) + \sin(\theta) = 2\sin\left(\frac{(\beta + \theta)}{2}\right)\cos\left(\frac{(\beta - \theta)}{2}\right)$$

A
Yes

B
No

6 Is this sum to product identity correct?

$$\cos(\alpha) - \cos(\beta) = 2\sin\left(\frac{2}{(\alpha + \beta)}\right)\cos\left(\frac{(\alpha - \beta)}{2}\right)$$

A
Yes

B
No

7 Is this sum to product identity correct?

$$\sin(\beta) + \sin(\gamma) = \sin\left(\frac{2}{(\beta + \gamma)}\right)\sin\left(\frac{(\beta - \gamma)}{2}\right)$$

A
Yes

B
No

8 Is this sum to product identity correct?

$$\cos(\beta) - \cos(\theta) = 2\sin\left(\frac{2}{(\beta + \theta)}\right)\cos\left(\frac{(\beta - \theta)}{2}\right)$$

A
Yes

B
No