



Trigonometry Identities - Sum/Difference Identity True/False (Degrees)

1 Is this sum/difference identity correct?

$$\tan(210^\circ - 120^\circ) = \frac{\cos(210^\circ) + \sin(120^\circ)}{1 - \tan(210^\circ)\tan(120^\circ)}$$

A
Yes

B
No

2 Is this sum/difference identity correct?

$$\cos(210^\circ + 150^\circ) = \cos(210^\circ)\cos(150^\circ) - \sin(210^\circ)\sin(150^\circ)$$

A
Yes

B
No

3 Is this sum/difference identity correct?

$$\tan(30^\circ + 225^\circ) = \frac{\tan(30^\circ) + \tan(225^\circ)}{1 - \tan(30^\circ)\tan(225^\circ)}$$

A
Yes

B
No

4 Is this sum/difference identity correct?

$$\cos(225^\circ + 30^\circ) = \sin(225^\circ)\cos(30^\circ) + \cos(225^\circ)\sin(30^\circ)$$

A
Yes

B
No

5 Is this sum/difference identity correct?

$$\cos(45^\circ + 315^\circ) = \cos(45^\circ)\cos(315^\circ) - \sin(45^\circ)\sin(315^\circ) \quad \tan(225^\circ - 240^\circ) = \sin(225^\circ)\cos(240^\circ) - \cos(225^\circ)\sin(240^\circ)$$

A
Yes

B
No

6 Is this sum/difference identity correct?

A
Yes

B
No

7 Is this sum/difference identity correct?

$$\tan(135^\circ - 120^\circ) = \frac{\tan(135^\circ) - \tan(120^\circ)}{1 + \tan(135^\circ)\tan(120^\circ)}$$

A
Yes

B
No

8 Is this sum/difference identity correct?

$$\sin(240^\circ + 315^\circ) = \sin(240^\circ)\cos(315^\circ) + \cos(240^\circ)\sin(315^\circ)$$

A
Yes

B
No