

[13-12-11-T11]
Sum of trig functions

■ Find the sum of the following. State the amplitude and phase shift of the sum.

[1] $2 \cos x + 2\sqrt{3} \sin x$

[2] $\frac{5\sqrt{3}}{2} \cos x + \frac{5}{2} \sin x$

[3] $\sqrt{2} \cos x + \sqrt{6} \sin x$

[4] $\sqrt{4} \cos x + \sqrt{12} \sin x$