

Some standard Trigonometrical Limits:

$$\textcircled{1} \lim_{x \rightarrow 0} \frac{\sin x}{x} = 1$$

$$\textcircled{2} \lim_{x \rightarrow 0} \frac{\tan x}{x} = 1$$

$$\textcircled{3} \lim_{x \rightarrow 0} \frac{\sin^{-1} x}{x} = 1$$

$$\textcircled{4} \lim_{x \rightarrow 0} \frac{\tan^{-1} x}{x} = 1$$

$$\textcircled{5} \lim_{x \rightarrow 0} \cos x = 1$$

$$\textcircled{6} \lim_{x \rightarrow a} \frac{\sin(x-a)}{(x-a)} = 1$$

$$\textcircled{7} \lim_{x \rightarrow a} \frac{\tan(x-a)}{(x-a)} = 1$$

$$\textcircled{8} \lim_{x \rightarrow 0} \frac{1 - \cos x}{x} = 0$$