

## Limits of Trig Functions

$$1. \frac{\lim_{x \rightarrow 0} \sin^3 x}{(2x)^3}$$

$$2. \frac{\lim_{x \rightarrow 0} \sin x}{\sqrt[3]{x}}$$

$$3. \frac{\lim_{x \rightarrow 0} 3x + \sin x}{x}$$

$$4. \frac{\lim_{x \rightarrow 0} 2 + \sin x}{3 + x}$$

$$5. \frac{\lim_{x \rightarrow 0} 2 \cos x - 2}{3x}$$

$$6. \frac{\lim_{x \rightarrow 0} \sin(-3x)}{4x}$$

$$7. \frac{\lim_{x \rightarrow 0} 4x^2 + 3x \sin x}{x^2}$$

$$8. \frac{\lim_{x \rightarrow 0} \cos x}{1 - \sin x}$$

$$9. \frac{\lim_{x \rightarrow 0} 1 - \cos 3x}{x}$$

$$10. \frac{\lim_{x \rightarrow 0} x \sin x}{x^2 + 1}$$

$$11. \frac{\lim_{x \rightarrow 0} 1 - 2x^2 - 2 \cos x + \cos^2 x}{x^2}$$

$$12. \frac{\lim_{x \rightarrow 0} 1 - \cos x}{\sin x}$$

$$13. \frac{\lim_{x \rightarrow 0} x + \tan x}{\sin x}$$

$$14. \frac{\lim_{x \rightarrow 0} x \cot x}{x}$$

$$15. \frac{\lim_{x \rightarrow 0} \sin^2 x}{x^2}$$

$$16. \frac{\lim_{x \rightarrow 0} \csc 2x}{\cot x}$$