

Trig Limits Worksheet

Name _____

$$1. \lim_{x \rightarrow 0} \frac{\sin x}{5x}$$

$$7. \lim_{x \rightarrow 0} \frac{(1 - \cos x)^2}{x}$$

$$2. \lim_{x \rightarrow 0} \frac{3(1 - \cos x)}{x}$$

$$8. \lim_{x \rightarrow \pi} x \sec x$$

$$3. \lim_{x \rightarrow 0} \frac{\sec(x) - 1}{x \sec x}$$

$$9. \lim_{x \rightarrow \pi/4} \frac{1 - \tan x}{\sin x - \cos x}$$

$$4. \lim_{x \rightarrow 0} \frac{\cos x \tan x}{x}$$

$$10. \lim_{x \rightarrow 0} \frac{\sin 2x}{\sin 3x}$$

$$5. \lim_{x \rightarrow 0} \frac{\sin x(1 - \cos x)}{2x^2}$$

$$11. \lim_{x \rightarrow 0} \frac{\sin^2 x}{x^2}$$

$$6. \lim_{x \rightarrow 0} \frac{\tan^2 x}{x}$$

$$12. \lim_{x \rightarrow 0} 1 + \cos 2x$$

$$13. \lim_{x \rightarrow 0} \frac{\sin x}{\sqrt[3]{x}}$$