

Name: _____

Limits Review Worksheet

1. $\lim_{x \rightarrow 1} \frac{x^2 + 3x + 2}{x + 1}$

2. $\lim_{x \rightarrow 2} \frac{x^2 + 2x + 3}{x - 2}$

3. $\lim_{x \rightarrow 2} \frac{x^2 + 3x}{x - 2}$

4. $\lim_{x \rightarrow 0} \frac{\sin(x)}{x}$ (hint: use L'Hôpital's theorem)

5. $\lim_{x \rightarrow 0} \frac{\sin(4x)}{\sin(2x)}$

6. $\lim_{x \rightarrow 0} \sin(x)$

7. $\lim_{x \rightarrow 0} \frac{4x^2 + 5}{x^2 + 3x^2 + x + 2}$

8. $\lim_{x \rightarrow 0} \frac{2^x}{1^x + 3^x + 2^x}$