$$\lim_{x \to 0} \frac{1}{x^2 + 2x + 1}$$

$$= \frac{1}{\lim_{x \to 0} 1}$$

$$= \frac{1}{\lim_{x \to 0} x^2 + \lim_{x \to 0} 2x + \lim_{x \to 0} 1}$$

$$= \frac{1}{\left[\lim_{x \to 0} x\right]^2 + 2 \cdot \lim_{x \to 0} x + 1}$$

$$= \frac{1}{0 + 0 + 1}$$

$$= 1$$

$$\lim_{x\to 1} \; 8x^3 + 12x^2 + 6x + 1$$

$$=$$

$$\lim_{x\to 1} 8x^3 + \lim_{x\to 1} 12x^2 + \lim_{x\to 1} 6x + \lim_{x\to 1} 1$$

$$=$$

$$8\cdot\left[\lim_{x\to 1} x\right]^3 + 12\cdot\left[\lim_{x\to 1} x\right]^2 + 6\cdot\lim_{x\to 1} x + 1$$

$$=$$

$$8\cdot 1^3 + 12\cdot 1^2 + 6\cdot 1 + 1$$

$$=$$

$$8\cdot 1 + 12\cdot 1 + 6 + 1$$

$$=$$

$$8 + 12 + 6 + 1$$

$$=$$

$$27$$