

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

$$2. \lim_{x \rightarrow 0} \frac{3x^2 + x}{4x^3 + x + 10}$$

$$3. \lim_{x \rightarrow 0,1} \frac{5x + 4}{1 - x}$$

$$4. \lim_{x \rightarrow 2} \frac{x^3 - 4x + 5}{x^2 + 6}$$

$$5. \lim_{x \rightarrow -\frac{2}{3}} \frac{3x^3 + 5x + 2}{3x + 8x + 4}$$

$$6. \lim_{x \rightarrow 3} \frac{x^2 - 9}{x^2 - 2x - 3}$$

$$7. \lim_{x \rightarrow 0} \frac{\sqrt{x+1} - 1}{x}$$

$$8. \lim_{x \rightarrow \infty} \frac{x^3 - 2x + 6}{3x^3 + x^2 - 26}$$

$$9. \lim_{x \rightarrow \infty} \frac{x^2 - 4x + 3}{x + 5}$$

$$10. \lim_{x \rightarrow \infty} \frac{x^2 - 2x + 5}{x^3 + 3x + 7}$$

$$11. \lim_{x \rightarrow \infty} \frac{3x^3 - 4x + 8}{5x^3 + 27x^2 + x}$$