

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

$$2. \quad \lim_{x \rightarrow 0} \frac{x}{16 - (x + 4)^2}$$

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

$$4. \quad \lim_{x \rightarrow 0^-} \frac{1}{x}$$

$$5. \quad \lim_{x \rightarrow -4} \frac{x^4 + 8x^3 + 16x^2}{x^3 + 4x^2}$$

$$6. \lim_{x \rightarrow 1} \frac{x^2 + 6x + 9}{x^3 + x^2}$$

$$7. \lim_{x \rightarrow -3} \frac{x^4 - 9x^2}{x^3 + 3x^2}$$

$$8. \lim_{h \rightarrow 0} \frac{(x+h)^2 + 4(x+h) - x^2 - 4x}{h}$$

$$9. \lim_{h \rightarrow 0} \frac{\frac{1}{x+h} - \frac{1}{x}}{h}$$