

**Evaluate the following.**

$$1. \lim_{x \rightarrow -4^+} \frac{1}{x + 4} =$$

$$2. \lim_{x \rightarrow 8} \frac{\sqrt{x+1} - 3}{x - 8} =$$

$$3. \lim_{x \rightarrow -6} \frac{x - 6}{x^2 + 36} =$$

$$4. \lim_{x \rightarrow \infty} \frac{8 - \frac{2}{x^2}}{\frac{7}{x^3} - 4} =$$

$$5. \lim_{x \rightarrow 4} \frac{5x - 1}{(x - 4)^2} =$$

$$6. \lim_{x \rightarrow \infty} \frac{8x - 2}{5 - 4x} =$$

$$7. \lim_{x \rightarrow 0^-} \frac{(x - 8)^2 - 64}{x} =$$

$$8. \lim_{x \rightarrow 6} \frac{x - 6}{x^2 - 4x - 12} =$$

$$9. \lim_{x \rightarrow -5^-} \frac{x + 3}{x - 5} =$$

$$10. \lim_{x \rightarrow 1} (7x^2 - 3x - 2) =$$

$$11. \lim_{x \rightarrow -\infty} \frac{5 - 2x}{3 - 5x - 6x^2} =$$

$$12. \lim_{x \rightarrow -\infty} \frac{-3x^2 + 2x - 1}{-4x + 3} =$$

$$13. \lim_{x \rightarrow 5} \frac{2x^2 - 5x - 25}{x - 5} =$$

$$14. \lim_{x \rightarrow 3} \frac{\sqrt{x+1} - 2}{x - 3} =$$

$$15. \lim_{x \rightarrow 4^+} \frac{\sqrt{x} - 2}{x - 4} =$$

$$16. \lim_{x \rightarrow 0} \frac{(x - 6)^2 - 36}{x} =$$

$$17. \lim_{x \rightarrow 4} \frac{4 - x}{2 - \sqrt{x}} =$$

$$18. \lim_{x \rightarrow 5} \frac{x + 1}{x + 2} =$$

$$19. \lim_{x \rightarrow 8} \frac{\sqrt{x+1} - 3}{x - 8} =$$

$$20. \lim_{x \rightarrow 4} \frac{5x - 1}{(x - 4)^2} =$$

$$21. \lim_{x \rightarrow \infty} \frac{8 - \frac{2}{x^2}}{\frac{7}{x^3} - 4} =$$

$$22. \lim_{x \rightarrow 16} \frac{\sqrt{x} - 4}{x - 16} =$$

$$23. \lim_{x \rightarrow 3} 4 =$$

$$24. \lim_{x \rightarrow 7} \frac{|x - 7|}{x - 7} =$$