

Speed Drill Warm Up
Day 23:

1. $\lim_{x \rightarrow 1^+} \sqrt{1-x^2}$		16. $\lim_{x \rightarrow \infty} \frac{3 \cos x}{\sqrt{x}}$	
2. $\lim_{x \rightarrow \infty} \frac{5x^2 + 7x - 8}{-4x^2 - 2x + 1}$		17. $\lim_{x \rightarrow \infty} \frac{7^x}{x^4 - x^5 + 3}$	
3. $\frac{d}{dx} [-7x + \sin x]$		18. $\frac{d}{dx} [5 - x]$	
4. $\frac{d}{dx} [4x^3 - 5x + \frac{7}{\pi+2}]$		19. $\lim_{x \rightarrow 5} \frac{x-5}{x^2-25}$	
5. $\frac{d}{dx} [\cos x]$		20. $\lim_{x \rightarrow \infty} \frac{7(x+1)(9-x)}{(10x+5)(x-4)}$	
6. $\lim_{x \rightarrow \infty} \frac{x+2}{x^2-5x}$		21. $\lim_{x \rightarrow 4} \frac{x-4}{x^2-3x-18}$	
7. $\frac{d}{dx} [5x^5 + 6x]$		22. $\frac{d}{dx} [\frac{1}{x}]$	
8. $\lim_{x \rightarrow \infty} \frac{10x^2 + 7x - 6}{5x^2 - 6x + 4}$		23. $\lim_{x \rightarrow \infty} \frac{x^7 + 4x^6 - 5x}{2x^7 + 6x^5 - 3x^2 + 10}$	
9. $\lim_{x \rightarrow 4} e^{\ln x}$		24. $\lim_{x \rightarrow \infty} \frac{\ln x}{4x}$	
10. $\lim_{x \rightarrow 2^-} \frac{x^2 - 4}{ x - 2 }$		25. $\lim_{x \rightarrow \infty} \frac{4x}{\ln x}$	
11. $\frac{d}{dx} [\sqrt[3]{x}]$		26. $\lim_{x \rightarrow 5} \frac{x^2 - 25}{x + 7}$	
12. $\lim_{x \rightarrow \infty} \frac{1}{x} + \frac{5x^2 + 1}{3x^2 - x}$		27. $\lim_{x \rightarrow \infty} \frac{4x^2(x+5)}{(x-1)(x+2)}$	
13. $\lim_{x \rightarrow 2^+} \frac{ x-2 }{x-2}$		28. $\lim_{x \rightarrow 4^-} \sqrt{16-x^2}$	
14. $\lim_{x \rightarrow 0^+} \frac{1}{x}$		29. $\lim_{x \rightarrow \infty} \frac{3x^2 + 6x}{x(x-5)}$	
15. $\lim_{x \rightarrow \infty} \frac{4x^3 + x}{x^2 - x^3}$		30. $\lim_{x \rightarrow \infty} \frac{x^4}{(x^2+1)(x^3-8)}$	