



Antiremed Kelas 11 Matematika

Limit Fungsi Aljabar - Latihan Soal

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Halaman 1

Tentukan nilai dari limit fungsi berikut!	
01. $\lim_{x \rightarrow 4} (3x - 7) = \dots$	
02. $\lim_{x \rightarrow 3} (5x - 11) = \dots$	
03. $\lim_{x \rightarrow 3} (x^2 - 2x) = \dots$	
04. $\lim_{x \rightarrow 2} (2x^2 - 4x + 3) = \dots$	
05. $\lim_{x \rightarrow -1} (-2x^3 + 9x + 4) = \dots$	
06. $\lim_{x \rightarrow -1} (3x^3 + 2x^2 - 3x - 4) = \dots$	
07. $\lim_{x \rightarrow 1} (4x^3 + 3x^2 - 24x + 22) = \dots$	
08. $\lim_{x \rightarrow -2} \sqrt[3]{x^2 - 3x + 6} = \dots$	
09. $\lim_{x \rightarrow -1} \frac{x^3 - 3x + 7}{5x^3 + 9x + 6} = \dots$	
10. $\lim_{x \rightarrow 2} \frac{\sqrt{x^3 + 2x + 3}}{x^2 + 5} = \dots$	



Tentukan nilai dari limit fungsi berikut!	
11. $\lim_{x \rightarrow 5} \frac{x^2 - 25}{x - 5} = \dots$	
12. $\lim_{x \rightarrow 1} \frac{x^2 + 5x - 6}{x - 1} = \dots$	
13. $\lim_{x \rightarrow -1} \frac{2x^2 - x - 3}{x + 1} = \dots$	
14. $\lim_{x \rightarrow -3} \frac{x^2 + 5x + 6}{x^2 - x - 12} = \dots$	
15. $\lim_{x \rightarrow 4} \frac{3x^2 - 17x + 20}{4x^2 + 25x + 36} = \dots$	
16. $\lim_{y \rightarrow -2} \frac{y^3 + 8}{y + 2} = \dots$	
17. $\lim_{s \rightarrow 1} \frac{s^3 - 1}{s - 1} = \dots$	
18. $\lim_{z \rightarrow 1} \frac{z^3 + z^2 - 5z + 3}{z^2 - 2z + 1} = \dots$	
19. $\lim_{t \rightarrow -2} \frac{t^3 + t^2 - 8t - 12}{t^2 + 4t + 4} = \dots$	
20. $\lim_{u \rightarrow 2} \frac{u^3 - u^2 - u - 2}{u^3 + u - 6} = \dots$	



Tentukan nilai dari limit fungsi berikut!	
21. $\lim_{x \rightarrow 4} \frac{x-4}{\sqrt{x}-2} = \dots$	
22. $\lim_{x \rightarrow 3} \frac{\sqrt{x}-\sqrt{3}}{x-3} = \dots$	
23. $\lim_{x \rightarrow 3} \frac{x-2}{\sqrt{x^2+1}-\sqrt{5}} = \dots$	
24. $\lim_{x \rightarrow -2} \frac{x+2}{2-\sqrt{8-x^2}} = \dots$	
25. $\lim_{x \rightarrow 5} \frac{\sqrt{3x+3}-\sqrt{5x-7}}{4x-20} = \dots$	
26. $\lim_{x \rightarrow 2a} \frac{\sqrt{x}-\sqrt{2a}}{\sqrt{x^2}-4a^2} = \dots$	
27. $\lim_{u \rightarrow 1} \frac{\sqrt{5u+4}-3}{\sqrt{3u+1}-2} = \dots$	
28. $\lim_{z \rightarrow 2} \frac{3-\sqrt{z+7}}{z^2+z-6} = \dots$	
29. $\lim_{t \rightarrow 2} \frac{\sqrt{t^2+5t+2}-\sqrt{t^2+3t+6}}{t^3+3t^2-10t} = \dots$	
30. $\lim_{s \rightarrow -1} \frac{s^3+9s+10}{\sqrt{2s^2+3s+2}-\sqrt{s^2+3s+3}} = \dots$	



Tentukan nilai dari limit fungsi berikut!	
31. $\lim_{x \rightarrow \infty} \frac{4x^3 - 3x^2 + 2x - 1}{5x^3 + 14x^2 - 7x + 2} = \dots$	
32. $\lim_{x \rightarrow \infty} \frac{5x^7 + 2x^2 + x}{6x^5 + 3x + 2} = \dots$	
33. $\lim_{x \rightarrow \infty} \frac{4x^3 + 5x - 2}{5x^4 - 10x^3 - 4} = \dots$	
34. $\lim_{x \rightarrow \infty} \frac{(4 + 5x)(2 - x)}{(2 + x)(1 - x)} = \dots$	
35. $\lim_{x \rightarrow \infty} \frac{(2x - 3)(x + 4)(3x - 7)(5x + 11)}{(x^2 + 5)(3x + 8)(5x - 18)} = \dots$	
36. $\lim_{y \rightarrow \infty} \frac{2}{9} \left(\frac{\sqrt{y^2 + 1}}{4y + 1} \right)$	
37. $\lim_{t \rightarrow \infty} \frac{4t - 5}{\sqrt{3t^2 - t - 1}} = \dots$	
38. $\lim_{u \rightarrow \infty} \frac{5u}{\sqrt{u^2 + 1} + u} = \dots$	
39. $\lim_{s \rightarrow \infty} \frac{\sqrt{s - 3} + \sqrt{5s + 1}}{\sqrt{5s - 1} + \sqrt{s + 3}} = \dots$	
40. $\lim_{z \rightarrow \infty} \frac{\sqrt{z^2 - 1} + \sqrt{z^2 + 2}}{\sqrt{3z^2 + 1} + \sqrt{3z^2 - 1}} = \dots$	