

- 85) $f(x-1) = \frac{2x+4}{x+1}$ ise $f'(2) = ?$ $\left[\begin{array}{l} -1 \\ c: -8 \end{array} \right]$
- 86) $f: Z \rightarrow R, f(2x^2 - 3x + 1) = 4x^2 + 6x - 5$ olduğuna göre $f'(0) = ?$ $[c: 14]$
- 87) $f(x^2 + 3x) = (x^2 - 4)^3$ ise $f'(4) = ?$ $\left[\begin{array}{l} c: \frac{54}{5} \\ [11] \end{array} \right]$
- 88) $f(2x-3) = 3x^2 + 2x - 1$ ise $f'(1) + f(-1) = ?$ $[11]$
- 89) $f(2x^3 + x^2 + 4) = 5x^2 - 2x + 19$ ise $f'(3) = ?$ $[-3]$
- 90) $f: R^+ \rightarrow R^+, f(x^2 + 2x) = x^3 + x + 1$ olduğuna göre $f'(3) = ?$ $[c: 1]$
- 91) $f(x^2 + x + 1) = x^3 + 2x + 1$ ise $f'(3) = ?$ $\left[\begin{array}{l} c: \frac{5}{3} \end{array} \right]$
- 92) $f: R^+ \rightarrow R, f(x^2 - 4x + 5) = 6x^2 + 8x$ fonk.nu için $f'(5) = ?$ $[c: 14]$
- 93) $f(x^2 + 2x) = (x^2 - 1)^3 + 2x + 5$ ise $f'(3) = ?$ $\left[\begin{array}{l} c: \frac{1}{2} \end{array} \right]$
- 94) $f\left(\frac{3x^2 + 2x}{2}\right) = (3x - x)^2$ ise $f'(8) = ?$ $\left[\begin{array}{l} c: 220 \\ [2] \end{array} \right]$
- 95) $f(2x) = 16x^3 + 2$ ve $g(x+1) = x^2 + 1$ ise $(g \circ f)'(1)$ değeri kaçtır? $[c: 36]$
- 96) $f(x+1) = (3x+4)^2$ ise $f(1) + f'(1) = ?$ $[c: 40]$ \square^5
- 97) $f\left(\frac{1}{x}\right) = \frac{1}{x^2} + x$ fonk. nu veriliyor. Tanımlı olduğu aralıkta $f'(2) = ?$ $[c: 2]$
- 98) $f(3x-1) = (x^3+1), g(2x+1)$ olmak üzere $f(5) = 9$ ve $g'(5) = 4$ ise $f'(5) = ?$ $[c: 28]$
- 99) $f(3x+1) = 2x^2 g(x) - m$ fonk.nu veriliyor. $g(-1) = \frac{3}{4}$ ve $g'(-1) = -2$ ise $f'(-2) = ?$ $\left[\begin{array}{l} c: \frac{-16}{3} \\ [2] \end{array} \right]$
- 100) $\frac{dx}{dx} [x f(x)] = x + x + 4$ ise $f(1) + f'(1) = ?$ $[3]$
- 101) $f^2(3x+1) = 4x^2 + 16x + 18$ ise $f(-2) \cdot f'(-2) = ?$ $\left[\begin{array}{l} 4 \\ 3 \end{array} \right]$
- 102) $f^{-1}(x^2 + 3x + 1) = 2x^3 + 4x + 1$ ise $f'(7) = ?$ $\left[\begin{array}{l} 1 \\ 2 \end{array} \right]$
- 103) $f(x^3 + 3) = 2x^2 - 1$ ise $(f^{-1})' = ?$ $[c: 3]$
- 104) $g(x^2 - x) = x^3 - 7x$ ise $(g^{-1})' = ?$ $[c: 3]$
- 105) $f(x) = x^2 - 2x$ ise f^{-1} fonk.nun $x = 1$ deki türevi kaçtır? $[c: türevi yok]$
- 106) $f(x) = x^2 + 2$ ise $(f^{-1})' = ?$ $[c: \frac{1}{4}]$
- 107) $f: R \rightarrow R, f(x) = x^3 + 3x$ ise $(f^{-1})' = ?$ $\left[\begin{array}{l} 1 \\ 4 \end{array} \right]$
- 108) $f(x) = x^3 + x + 7$ ise $(f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{1}{13} \\ (-4) \end{array} \right]$
- 109) $f: R \rightarrow R, f(x) = x^3 - 1$ ise $(f^{-1})' = ?$ $\left[\begin{array}{l} 1 \\ 12 \end{array} \right]$
- 110) $f: R^+ \rightarrow R^+, f(x) = 3x^2 - 1$ için $(f^{-1})' = ?$ $\left[\begin{array}{l} 1 \\ 6 \end{array} \right]$
- 111) $f(x) = 3x^3 - 4$ ise $(f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{1}{36} \end{array} \right]$
- 12) $f[2, \infty) \rightarrow [3, \infty), f(x) = x^2 - 4x + 7$ fonk.nu için $(f^{-1})' = ?$ $\left[\begin{array}{l} 2 \\ c: \frac{1}{7} \end{array} \right]$
- 13) $f(x) = x^5 - x^2$ ise $(f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{1}{7} \\ c: \frac{1}{3} \end{array} \right]$
- 14) $f(x) = x^3 + 4$ ise $(f^{-1})' = ?$ $[c: 2]$
- 15) $f(x) = 3 + \sqrt{2x-1}$ ise $(f^{-1})' = ?$ $[c: 2]$
- 16) $f: R \rightarrow R, f(x) = \frac{5-x}{x-3}$ ile tanımlı fonk. için $(f^{-1})' = ?$ $[c: 23]$
- 17) $f: R - \{3\} \rightarrow R - \{-1\}, f(x) = \frac{5-x}{x-3}$ ile tanımlı fonk. nu için $(f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{1}{2} \\ c: \frac{1}{25} \end{array} \right]$
- 18) $f(x) = \frac{x+1}{x+2}$ ise $(f^{-1})' = ?$ $[c: 4]$
- 19) $f(x) = x + 3$ ise $(f^{-1})' = ?$ $[c: 4]$
- 20) $f: [1, \infty) \rightarrow R, f(x) = \sqrt{x^2 - 1} - 3$ ile tanımlı f fonk.nu için $(f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{7}{10} \end{array} \right]$
- 21) $y = \log(x^2 - 3x)$ ise $y' = ?$ $\left[\begin{array}{l} c: \frac{2x-3}{x^2-3x} \cdot \log e \end{array} \right]$
- 22) $f(x) = \log(x^3 - 3)$ ise $f'(3) = ?$ $\left[\begin{array}{l} c: \frac{9 \log_2 e}{2} \end{array} \right]$
- 23) $g(x) = \log(x^2 - 3x)$ ise $f'(6) = ?$ $\left[\begin{array}{l} c: \frac{\log e}{2} \end{array} \right]$
- 24) $h(x) = \log(4x^2 - 8)$ ise $h'(2) = ?$ $[c: 2 \log_2 e]$
- 25) $y = \ln(x^3 + 2)$ ise $\frac{dy}{dx} = ?$ $[c: 3]$
- 26) $f(x) = \log(x - 2)$ ise $f'(3) \cdot (f^{-1})' = ?$ $[c: 1]$
- 27) $f(x) = x^2 \cdot \log e$ ise $f'(e) = ?$ $[c: e]$
- 28) $f(x) = \log_2 5x + \log_5 2x$ ise $f'\left(\frac{1}{\ln 5}\right) = ?$ $[\log_2 10]$
- 29) $f(x) = \log(x)$ ise $\frac{df^{-1}}{dx} = ?$ $[c: 3^x]$
- 30) $f(x) = \ln(x^2 + 2x)$ ise $f'(x) = ?$ $\left[\begin{array}{l} c: \frac{2x+2}{x^2+2x} \end{array} \right]$
- 31) $f(x) = (x-1) \ln x$ ise $f'(e) = ?$ $\left[\begin{array}{l} c: \frac{2e-1}{e} \end{array} \right]$
- 32) $f(x) = \ln(3x-2)$ ise $f(1) + (f^{-1})' = ?$ $\left[\begin{array}{l} c: \frac{1}{3} \end{array} \right]$
- 33) $f(x) = \ln^2 x^2$ ise $f'\left(\frac{1}{e}\right) = ?$ $[c: -8e]$
- 34) $f(x) = \ln(2x^3 - x)$ ise $f'(1) = ?$ $[c: 5]$
- 35) $f(x) = \ln x^3 + \ln x^2 + \ln \frac{1}{x^4}$ ise $f'(e) = ?$ $[c: e^{-1}]$
- 36) $f(x) = x^2 \cdot \ln x$ ise $f'(x) = ?$ $[c: x(2 \ln x + 1)]$
- 37) $f(x) = \log(x+2)^2$ ise $f'(x) = ?$ $\left[\begin{array}{l} c: \frac{2}{x+2} \cdot \log e \end{array} \right]$
- 38) $f(x) = \ln[\log(x^2 + 36)]$ ise $f'(8) = ?$ $\left[\begin{array}{l} c: \frac{2}{25} \log e \end{array} \right]$
- 39) $f(x) = \ln(x^4 + 3x^2 + 1)$ ise $f'(1) = ?$ $[c: 2]$
- 40) $y = \ln x^4 + \ln x^3 + \ln x^{-5}$ ise $y' = ?$ $[c: 2]$



41) $f(x) = \ln^2(2x-1)$, $g(x) = \ln(4x^2-2)$ ve $h(x) = f(x) + g(x)$ ise $h'(1) = ?$ [c:4]

42) $f(x) = \ln(\ln x)$ ise $f'(e) = ?$ [c:e⁻¹]

43) $f(x) = \ln \ln \ln x$ ise $f'(x) = ?$ [c: $\frac{1}{x \cdot \ln x \cdot \ln(\ln x)}$]

44) $f(x) = \ln\left(\frac{x+1}{x}\right)^4$ ise $f'(3) = ?$ [c:-1]

45) $f(x) = \ln 4 + \sqrt{x+1}$ ise $f'(8) = ?$ [c: $\frac{1}{42}$]

46) $f(x) = \ln(2x^3\sqrt{3x+1})$ ise $f'(1) = ?$ [c: $\frac{27}{8}$]

47) $f(x) = \ln\frac{x^4-1}{\sqrt{2x^2-1}}$ ise $f'(0) = ?$ [c:-1]

48) $f(x) = \ln(x^2-1) + e^x$ ise $f'(x) = ?$ [c: $2x + e$]

49) $f(x) = e^{2x}$ ise $f''(\ln x) = ?$ [c:4x²]

50) $f(x) = x^2 e^{3x}$ ise $f'(2) = ?$ [c:16e⁶]

51) $f(x) = x^2 \cdot e^{2x}$ ise $f'(x) = ?$ [c:2x.e^{2x}(1+x)]

52) $f(x) = e^x$ ise $\frac{f'(x)}{f(x)} = ?$ [c:2x + $\frac{1}{x}$]

53) $f(x) = x \cdot e^{-2x}$ ise $f''(0) = ?$ [c:-4]

54) $f(x) = e^{x^2}$ ise $(f^{-1})' = ?$ [c: $\frac{1}{2x}$]

55) $f(x) = e^{x^2}$ ise $(f^{-1})' = ?$ [c:-1]

56) $f(x) = e^{2x}$, $g(x) = f^{(0)}(x)$, $h(x) = g'(x) \cdot e^x$ fonk. ları için $h'(0) = ?$ [c:12]

57) $e^x \frac{d^2(e^{-x} \cdot x^2)}{dx^2} = ?$ [c:x²-4x+2]

58) $f(x) = (x^2+1) \cdot e^x$ ise $e^{-x} \frac{d^2 f(x)}{dx^2} = ?$ [c:x²+4x+3]

59) $f(x) = e^x \cdot \frac{d^2(x \cdot e^x)}{dx^2}$ ise $f(0) = ?$ [c:2]

60) $f(x) = \frac{x^e - x}{x}$ ise $\lim_{h \rightarrow 0} \frac{f(1+h) - f(1)}{h} = ?$ [e-1]

61) $g(x) = x^{\ln x}$ ise $g'(1) = ?$ [c:0]

62) $f(x) = x^{3x}$ ise $f'(e) = ?$ [c:6.e^{3e}]

63) $f(x) = 3^{\ln x}$ ise $f'(x) = ?$ [c: $\frac{1}{x} \cdot 3^{\ln x} \cdot \ln 3$]

64) $y = (3e)^x$ ise $y' = ?$ [c:e \cdot \ln 3 \cdot (3e)^x]

65) $f(x) = e^{2x} \cdot 3^{x^2}$ ise $f'(1) = ?$ [c:6e²(1+ln3)]

66) $y = x^{(\ln x)^2}$ ise $y' = ?$ [c:3 \cdot x^{(\ln x)^2-1} \cdot \ln^2 x]

67) $f(x) = \left(\frac{x}{e}\right)^x$ ise $f'(1) = ?$ [c: $\frac{1}{e}$]

68) $f: R \rightarrow R$ ve $g: R \rightarrow R$ olmak üzere $f'(2\pi) = a$ ise $g(a) = ?$ [c:3e]

69) $y = 3^{(e^x)}$ ise $y' = ?$ [c:e \cdot 3^{\ln 3} \cdot \ln 3]

70) $f(x) = x^{x^2-2}$ ise $f'(1) = ?$ [c:-1]

71) $f(x) = 2x$, $g(x) = 2^{f(x)}$ ise $g'(1) = ?$ [c:4 \ln 4]

72) $f(x) = 5^x + x^5$ ise $f'(1) = ?$ [c:5 + \ln 5]

73) $f(x) = x^2 \cdot 5^x$ ise $f'(1) = ?$ [c:5 \cdot (2 + \ln 5)]

74) $f(x) = x^2 \cdot 4^x$ ise $f'(1) = ?$ [c:8 + 4 \ln 4]

75) $f(x) = 2^x \cdot \ln 2$ ise $f'(x) = ?$ [c:2^x \cdot (\ln 2)^2]

76) $f(x) = 2^{(3x+4)\ln x}$ ise $f'(1) = ?$ [c:7 \ln 2]

77) $f(x) = \sqrt[3]{e^x}$ ise $f'(x) = ?$ [c: $\frac{1}{3} e^{\frac{x}{3}}$]

78) $f(x) = (4x+3)^{4x+3}$ ise $f'(0) = ?$ [c:108 \cdot (1 + \ln 3)]

79) $f(x) = a^{2x+4x}$, $g(x) = \log_a(4x+4)$ olduğuna göre $f'(-2) \cdot g'(-2) = ?$ [c:4]

80) $y = e^{3x-1}$ ise $\frac{dy}{dx} \Big|_{x=\frac{1}{3}} = ?$ [c:9]

81) $y = x \cdot 3^x$ ise $\frac{dy}{dx} \Big|_{x=1} = ?$ [c:3 + \ln 27]

82) $f(x) = \frac{3^x + x^3}{3^x \cdot x^3}$ ise $f'(1) = ?$ [c: $\frac{9 \ln 3}{3}$]

83) $n \in Z^+$ olmak üzere $\frac{d^n(x \cdot e^x)}{dx^n} \Big|_{x=1} = ?$ [c:e(n+1)]

84) $\frac{d^2}{dx^2} \left[e^x \cdot \frac{d}{dx} (e^x \cdot 61) \right] = ?$ [c:12e]

85) $e^{-2x} \cdot \frac{d^2(x \cdot e^{2x})}{dx^2}$ in $x=2$ için değeri nedir? [c:24]

86) $f(x) = x^3 \cdot 5^{x^2}$ ise $f'(x) = ?$ [c: $3x^2 \cdot 5^x (3 + 2x^2 \ln 5)$]

87) $f(x) = (x-1)^{3x+1}$ ise $\frac{f'(2)}{f(2)} = ?$ [c:\ln 27 + 3]

88) $f(x) = (x+1)^{x+1}$ ise $f'(9) = ?$ [(ln 10 + 1) \cdot 10^{10}]

89) $f(x) = \sin x$ ise $f'\left(\frac{\pi}{6}\right) = ?$ [c: $\frac{\sqrt{3}}{2}$]

90) $f(x) = e^{\ln(\sin x)}$ ise $f'\left(\frac{\pi}{2}\right) = ?$ [c:0]

91) $f(x) = \ln e^{\sin x}$ ise $f'(x) = ?$ [c:\cos x]

92) $f(x) = \sin^2 2x$ ise $f'(x) = ?$ [c:2 \sin 4x]

93) $f(x) = \cos 2x$ ise $(f^{-1})' \Big|_{\left(\frac{1}{2}\right)} = ?$ [c:4\sqrt{3}]

94) $f(x) = \cos x$ ise $f'(0) + f''(0) + f'''(0) = ?$ [c:-1]

95) $f(x) = 2 \cos^2 4x$ ise $f'(x) = ?$ [c:-8 \sin 8x]

96) $f(x) = \cos 3x \cdot \sin 2x$ ise $f'\left(\frac{\pi}{6}\right) = ?$ [c: $\frac{-3\sqrt{3}}{6}$]

97) $\frac{d^2}{dx^2} (\sin^2 x) = ?$ [c:2 \cos^2 2x]

98) $f(x) = \sin^2 4x$ ise $f'\left(\frac{\pi}{2}\right) = ?$ [c:0]

99) $f(x) = \sin^2(x+a)$ ve $f^4(0) = 1$ ise $a = ?$ [c: $\frac{\pi}{4}$]

100) $y = \cos^2(\ln x)$

ise $\frac{dy}{dx} = ?$ at $x=1$ $\left[\begin{array}{l} c \\ : \\ 0 \end{array} \right]$

$$\left. \frac{dy}{dx} \right|$$