

- 85) $f(x-1) = \frac{2x+4}{x+1}$ ise $f'(2) = ?$ $[c: \frac{-1}{8}]$
- 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 $f'(4) = ?$ $[c: \frac{54}{5}]$
- 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 $f'(3) = ?$ $[c: \frac{5}{3}]$
- 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 $f'(3) = ?$ $[c: \frac{1}{2}]$
- 94) $f(\frac{3x^2 + 2x}{2}) = (3x^3 - x)^2$ ise $f'(8) = ?$ $[c: 220]$
- 95) $f(2x) = 16x^3 + 2$ ve $g(x+1) = x^2 + 1$ ise $(gof)'(1)$ değeri kaçtır? $[c: 36]$
- 96) $f(x+1) = (3x+4)^2$ ise $f(1) + f'(1) = ?$ $[c: 40]$
- 97) $f(1 + \frac{1}{x}) = \frac{1}{x^2} + \frac{1}{x} + x$ 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. $g(-1) = 3$ ve $g'(-1) = -2$ ise $f'(-2) = ?$ $[c: \frac{-16}{3}]$
- 00) $\frac{d}{dx}[x^2 f(x^2)] = x^3 + x + 4$ ise $f(1) + f'(1) = ?$ $[3]$
- 01) $f^2(3x+1) = 4x^2 + 16x + 18$ ise $f(-2).f'(-2) = ?$ $[\frac{4}{3}]$
- 02) $f^{-1}(x^2 + 3x + 1) = 2x^3 + 4x + 1$ ise $f'(7) = ?$ $[\frac{1}{2}]$
- 03) $f(x^3 + 3) = 2x^2 - 1$ ise $(f^{-1})'_{(4)} = ?$ $[c: 3]$
- 04) $g(x^2 - x) = x^3 - 7x$ ise $(g^{-1})'_{(5)} = ?$ $[c: 3]$
- 05) $f(x) = x^2 - 2x$ ise $f_{(x)}^{-1}$ fonk.nun $x = 1$ deki türevi kaçtır? $[c: \text{türevi yok}]$
- 06) $f(x) = x^2 + 2$ ise $(f^{-1})'_{(6)} = ?$ $[c: \frac{1}{4}]$
- 07) $f: R \rightarrow R$, $f(x) = x^3 + 3x$ ise $(f^{-1})'_{(-4)} = ?$ $[\frac{1}{6}]$
- 08) $f(x) = x^3 + x + 7$ ise $(f^{-1})'_{(-3)} = ?$ $[c: \frac{1}{13}]$
- 09) $f: R \rightarrow R$, $f(x) = x^3 - 1$ ise $(f^{-1})'_{(7)} = ?$ $[\frac{1}{12}]$
- 10) $f: R^+ \rightarrow R^+$, $f(x) = 3x^2 - 1$ için $(f^{-1})'_{(2)} = ?$ $[\frac{1}{6}]$
- 11) $f(x) = 3x^3 - 4$ ise $(f^{-1})'_{(20)} = ?$ $[c: \frac{1}{36}]$

- 12) $f[2, \infty) \rightarrow [3, \infty)$, $f(x) = x^2 - 4x + 7$ fonk.nu için $(f^{-1})'_{(4)} = ?$ $[c: \frac{1}{2}]$
- 13) $f(x) = x^5 - x^2$ ise $(f^{-1})'_{(-2)} = ?$ $[c: \frac{1}{7}]$
- 14) $f(x) = x^3 + 4$ ise $(f^{-1})'_{(5)} = ?$ $[c: \frac{1}{3}]$
- 15) $f(x) = 3 + \sqrt{2x-1}$ ise $(f^{-1})'_{(5)} = ?$ $[c: 2]$
- 16) $f: R - \{\frac{-5}{2}\} \rightarrow R - \{\frac{3}{2}\}$, $f(x) = \frac{3x-4}{2x+5}$ ile tanımlı fonk. için $(f^{-1})'_{(1)} = ?$ $[c: 23]$
- 17) $f: R - \{3\} \rightarrow R - \{-1\}$, $f(x) = \frac{5-x}{x-3}$ ile tanımlı fonk. nu için $(f^{-1})'_{(1)} = ?$ $[c: \frac{-1}{2}]$
- 18) $f(x) = \frac{x+1}{x+2}$ ise $(f^{-1})'_{(6)} = ?$ $[c: \frac{1}{25}]$
- 19) $f(x) = \frac{x-1}{x+3}$ ise $(f^{-1})'_{(2)} = ?$ $[c: 4]$
- 20) $f: [1, \infty) \rightarrow R$, $f(x) = \sqrt{x^2-1} - 3$ ile tanımlı f fonk.nu için $(f^{-1})'_{(4)} = ?$ $[c: \frac{7\sqrt{2}}{10}]$
- 21) $y = \log_5(x^2 - 3x)$ ise $y' = ?$ $[c: \frac{2x-3}{x^2-3x} \cdot \log_5 e]$
- 22) $f(x) = \log_2(x^3 - 3)$ ise $f'(3) = ?$ $[c: \frac{9\log_2 e}{2}]$
- 23) $g(x) = \log(x^2 - 3x)$ ise $f'(6) = ?$ $[c: \frac{\log e}{2}]$
- 24) $h(x) = \log_2(4x^2 - 8)$ ise $h'(2) = ?$ $[c: 2\log_2 e]$
- 25) $y = \ln(x^3 + 2)$ ise $\frac{dy}{dx}\bigg|_{x=-1} = ?$ $[c: 3]$
- 26) $f(x) = \log_4(x-2)$ ise $f'(3).(f^{-1})'_{(-2)} = ?$ $[c: 1]$
- 27) $f(x) = x^2 \cdot \log_x e$ ise $f'(e) = ?$ $[c: e]$
- 28) $f(x) = \log_2 5x + \log_5 2x$ ise $f'(\frac{1}{\ln 5}) = ?$ $[\log_2 10]$
- 29) $f(x) = \log_3(x-1)$ ise $\frac{df^{-1}}{dx} = ?$ $[c: 3^x]$
- 30) $f(x) = \ln(x^2 + 2x)$ ise $f'(x) = ?$ $[c: \frac{2x+2}{x^2+2x}]$
- 31) $f(x) = (x-1)\ln x$ ise $f'(e) = ?$ $[c: \frac{2e-1}{e}]$
- 32) $f(x) = \ln(3x-2)$ ise $f(1) + (f^{-1})'_{(0)} = ?$ $[c: \frac{1}{3}]$
- 33) $f(x) = \ln^2 x^2$ ise $f'(\frac{1}{e}) = ?$ $[c: -8e]$
- 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) $f(x) = \log_5(x+2)^2$ ise $f'(x) = ?$ $[c: \frac{2}{x+2} \cdot \log_5 e]$
- 38) $f(x) = \ln[\log(x^2 + 36)]$ ise $f'(8) = ?$ $[c: \frac{2}{25} \log e]$
- 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 $y' = ?$ $[c: \frac{2}{x}]$

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

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

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

50) $f(x) = x^2 e^{3x}$ ise $f'(2) = ?$ [c: $16e^6$]

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

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

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

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

55) $f(x) = e^{x^2-x}$ ise $f'_{(0)} = ?$ [c:-1]

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

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

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

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

60) $f(x) = \frac{x^e - x}{x^\pi}$ 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: $6e^{3e}$]

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

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

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

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

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

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: $3^{-1} \cdot e^{\frac{x}{3}}$]

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

79) $f(x) = a^{2x^2+4x}$, $g(x) = \log_a(4x+4)$ 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) $n \in \mathbb{Z}^+$ olmak üzere $\frac{d^n(x \cdot e^x)}{dx^n} \Big|_{x=1} = ?$ [c: $e(n+1)$]

84) $\frac{d^2}{dx^2} \left[e^{-x} \cdot \frac{d}{dx} (e^{3x} + e^x - 61) \right] = ?$ [c: $12e^{2x}$]

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

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

87) $f(x) = (x^2-1)^{3x+1}$ ise $\frac{f'(2)}{3^7} = ?$ [c: $\ln 27 + \frac{28}{3}$]

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

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

90) $f(x) = e^{\ln(\sin x)}$ ise $f'(\frac{\pi}{2}) = ?$ [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 $(f^{-1})'_{(\frac{1}{2})} = ?$ [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 $f'(\frac{\pi}{6}) = ?$ [c: $\frac{-3\sqrt{3}}{2}$]

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

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

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

00) $y = \cos^2(\ln x)$ ise $\frac{dy}{dx} \Big|_{x=1} = ?$ [c:0]