1. s
2. t
3. $s(t) = 64 - 16(t-1)^2$
4. $y = s(t)$
5. $0 \leq t \leq 3$
6. $0 < t < 1$
7. $AV_{[0.5,1]} = \frac{s(1)-s(0.5)}{1-0.5}$
8. $t = a$
9. $t = b$
10. $B = (0.8, s(0.8))$
11. $m = 12.8$
12. $-16 > -32$
13. $b = a + h$
14. $h \neq 0$
15. $s(t) = 100\cos(0.75t) \cdot e^{-0.2t} + 100$
16. $s(15) - s(0) \approx -98.75$
17. $v(t)$
18. f
19. $y = f(x)$
20. $P(t)$
21. $P(t) = 181843(1.04)^{t/10}$
22. $\frac{f(b)-f(a)}{b-a} = \frac{\Delta f}{\Delta x}$
23. $\lim_{x\to a} f(x) = L$
24. $g(x) = \frac{16-16x^2}{x-1}$
25. $g(x) = \sin\left(\frac{\pi}{x}\right)$
26. $\{0.1, 0.01, 0.001, \ldots\}$
27. $g(10^{-k})$
28. $IV_{t=a}$
29. $x = \pm 2$
30. $g(x) = -\frac{|x+3|}{x+3}$
31. $a \geq 0$
32. $-\frac{|x+3|}{x+3} = -\frac{x+3}{x+3} = -1;$
33. $f'(a)$

34. 1×1

35. $p(z)$

36. $q(s) = s^3$

37. $F(t) = \dfrac{1}{t}$

38. $G(y) = \sqrt{y}$

39. $(-\infty, 0)$

40. $\frac{df}{dx}$

41. $F'(30) \approx= 3.85$

42. $2\dot{\imath}.341$

43. r

44. $C(r)$

45. $^\circ$

46. T

47. $y = f''(x)$

48. $f(x) = \begin{cases} 3(x+2)+2 & \text{for } -3 < x < -2 \\ \frac{2}{3}(x+2)+1 & \text{for } -2 \leq x < -1 \\ \frac{2}{3}(x+2)+1 & \text{for } -1 < x < 1 \\ 2 & \text{for } x = 1 \\ 4 - x & \text{for } x > 1 \end{cases}$

49. $\bullet$

50. $f(x) = x^n$

51. $\frac{d}{dx}\left[\square\right]$

52. $f(x) = c$

53. $f'(x) = a^x \ln(a)$

54. $h(w) = w^{3/4}$

55. $s(t) = \arccos(t)$

56. α

57. β

58. $N(t)$

59. $S(t)$

60. $Q(x)$

61. $R(x) = \dfrac{x^2 - 2x - 8}{x^2 - 9}$

62. $Y(t)$

63. $\tan(x)$
64. $\cot(x)$
65. $\sec(x)$
66. $\csc(x)$
67. θ
68. $g'(r) = \frac{r\sec(r)\tan(r)+\sec(r)-rln(5)\sec(r)}{5^r}$
69. $x \longrightarrow x^2 \longrightarrow \sin(x^2)$
70. $D(x)$
71. $u(x)$
72. $Z(x) = q(p(x))$
73. $\frac{dV}{dh}\big|_{h=1} = 7\pi$
74. $\arcsin(x)$
75. $\arctan(x)$
76. $f : A \to B$
77. $\left.\frac{dy}{dx}\right|_{\left(\frac{\pi}{2},\frac{\pi}{2}\right)} = \frac{\sin(0)-\cos(\pi)}{\cos(\pi)+\sin(0)} = -1$
78. $\lim\limits_{x\to 2} \frac{f(x)}{g(x)}$
79. $p(x) = a_n x^n + a_{n-1}x^{n-1} + \cdots a_1 x + a_0$
80. $\lim_{x\to\infty} \frac{x^2}{e^x}$?
81. $x \to infty$
82. $E = (\sqrt{3}, f(\sqrt{3})$
83. x_M
84. $h(x)to0$
85. $\frac{dh}{dt}\big|_{h=5}$
86. $H(x) = x^3 + x^2 + 5$
87. $\triangle t$
88. $U = C_1 + C_2 + C_3 + C_4$
89. Σ
90. $\sum_{k=1}^{100} k = 1 + 2 + 3 + \cdots + 100$
91. $\overline{x}_{i+1} = \frac{x_i+x_{i+1}}{2}$
92. x^*_{i+1}
93. $\int_a^b f(x)\,dx$

94. $f_{\mathrm{AVG}[a,b]} = \lim_{n\to\infty} \frac{f(x_1)+f(x_2)+\cdots+f(x_n)}{n}$
95. $g(x) = |x| - 1$
96. $\operatorname{erf}(x) = \frac{2}{\sqrt{\pi}} \int_0^x e^{-t^2}\, dt$
97. $\int \frac{1}{16-5x^2}\, dx = \frac{\sqrt{5}}{20} \operatorname{arctanh}(\frac{\sqrt{5}}{4}x)$
98. $\int \frac{1}{16-5x^2}\, dx = \frac{1}{8\sqrt{5}} \left(\log(4\sqrt{5}+5x) - \log(4\sqrt{5}-5x)\right) + \text{constant}$
99. $\sinh^{-1}(x^2)$
100. $\ln|e^x + \sqrt{e^{2x}+4}.|$
101. $\rho(x)$
102. $W \approx 0.6 \cdot 52.0666 = 31.23996$
103. 1.25%
104. $\frac{dT}{dt}|_{T=105}$
105. $\bar{y}$
106. $y(\bar{t}) - E_{\Delta t} \approx K\Delta t$
107. $\vdots$
108. \$5000
109. $\left\{\frac{1+n}{2+n}\right\}$
110. $\left\{\frac{10^n}{n!}\right\}$
111. $P_3'''(0) = f'''(0)$
112. $|S_{100} - \sum_{k=0}^{\infty}(-1)^k \frac{1}{2k+1}| <\approx 0.0049$
113. $\ln(x) == 1(x-1) - \frac{1}{2}(x-1)^2 + \frac{1}{3}(x-1)^3 - \frac{1}{4}(x-1)^4 + \frac{1}{5}(x-1)^5 - \cdots$
114. $\displaystyle\int \frac{u^2 du}{\sqrt{u^2 \pm a^2}} = \frac{u}{2}\sqrt{u^2 \pm a^2} \mp \frac{a^2}{2} \ln|u + \sqrt{u^2 \pm a^2}| + C$
115. $\displaystyle\int \frac{du}{u\sqrt{u^2 - a^2}} = \frac{1}{a} \operatorname{arcsec}\left(\frac{u}{a}\right) + C$