1. $\lim_{x \to a^+} f(x) = \pm\infty$

2. $\lim_{x \to c} f(x) = f(c)$

3. $\{x | x \geq -6\}$

4. $(-\infty, \infty)$

5. $[-4, \infty)$

6. $(g \circ f)(x)$

7. $y = 3(\sqrt[3]{x^2 + 8})^2 - 12 = 3(x^2 + 8)^{\frac{2}{3}} - 12$

8. $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

9. $f(x_1) \neq f(x_2)$

10. $m = \frac{y_2 - y_1}{x_2 - x_1}$

11. $\lim_{x \to \infty} f(x) = 2$

12. $\lim_{h \to 0} \frac{f(x+h) - f(x)}{h}$

13. $L(x) = f(a) + f'(a)(x - a)$

14. $\int (f(x) \pm g(x))\ dx$

15. $\log_3 2 + \log_3 x$

16. $ln(\frac{x^3}{e^2})$

17. $\int_a^b |v(t)| dt = \int_a^b \sqrt{(x'(t))^2 + (y'(t))^2} dt$

18. $A(t) = Pe^{rt}$

19. $z = \frac{x_i - u}{\sigma}$

20. $\hat{p} \pm 2(\sqrt{\frac{\hat{p}(1-\hat{p})}{n}}$

21. $y - k = \frac{1}{4p}(x - h)^2$

22. $\bar{x} \pm 2(\frac{s}{\sqrt{n}})$

23. $P(E) = \frac{n(E)}{n(S)}$

24. $P\ (\ A \cup B) = P(A)\ + P(B)\ -\ P(A \cap B)$

25. $L = \int_a^b \sqrt{1 + (f'(x))^2} dx$

26. $\frac{11!}{2!\cdot 2!\cdot 2!}$

27. $x = 1 \pm \sqrt{6}$

28. $\sum_{m=3}^{6} (m\ -\ 1)^2$

29. $\frac{dy}{dt} = ky(a - y)$

30. $\frac{dy}{dx} = \frac{\frac{dy}{d\theta}}{\frac{dx}{d\theta}} = \frac{\frac{dr}{d\theta} sin\theta + (r) cos\theta}{\frac{dr}{d\theta} cos\theta + (r)(-sin\theta)}$

31. $S_n = \frac{a_1(1-r^n)}{1-r}$

32. $|a| = \begin{cases} a, a \geq 0 \\ -a, a < 0 \end{cases}$

33. $|x + 5|\ =\ 9$

34. $\frac{22}{2x^2-9x-5} - \frac{3}{2x+1} = \frac{2}{x-5}$

35. $\frac{p(x)}{x-a} = q(x) + \frac{r}{x-a}$

36. $y\ -\ y_1 = m(x\ -\ x_1)$

37. $A = \frac{1}{2} \int_{\theta_1}^{\theta_2} r^2 d\theta$

38. $f(f'(x)) = x$

39. $f(x) = \sum_{n=0}^{\infty} \frac{f^n(c)(x-c)^n}{n!} = f(c) + f'(c)(x - c) + \frac{f''(c)(x-c)^2}{2!} + \cdots + \frac{f^n(c)(x-c)^n}{n!} + \cdots$

40. $D = \sqrt{(x_2\ -\ x_1)^2 + (y_2\ -\ y)^2}$

41. $cos^2(\theta) + sin^2(\theta) = 1$

42. $\int_a^b v(t)dt = < \int_b^a x'(t)dt, \int_a^b y'(t)dt >$

43. $sin(\frac{11\pi}{6})$

44. $\int \frac{1}{|x|\sqrt{x^2 - 1}} dx$

45. $f''(x) < 0$

46. $\frac{1}{2}\Delta x(f(x_1) + 2f(x_2) + 2f(x_3) + \cdots + 2f(x_n) + f(x_{n-1}))$

47. $\frac{1}{b-a}\int_a^b f(x)\,dx$

48. $\frac{dF}{dx} = \frac{dy}{dx}\int_a^x f(t)\,dt = f(x)$

49. $F(x) = \int_{3x^2}^{10} ln(2+t^2)dt$

50. $\frac{d}{dx} sec^{-1}(x^2)$