(11) $\frac{d}{dx}(c) = 0$

(12) $\frac{d}{dx}[cf(x)] = cf'(x)$

(13) $\frac{d}{dx}(e^{mx}) = me^{mx}$

(14) $\frac{d}{dx}(a^{mx}) = ma^{mx}\log_e a$

(15) $\frac{d}{dx}(\sin mx) = m\cos mx$

(16) $\frac{d}{dx}(\cos mx) = -m\sin mx$

(17) $\frac{d}{dx}(\tan mx) = m\sec^2 mx$

(18) $\frac{d}{dx}(\cot mx) = -mcosec^2 mx$

(19) $\frac{d}{dx}(\sec mx) = m\sec mx\tan mx$

(20) $\frac{d}{dx}(cosec\ mx) = -mcosec\ mx\cot mx$

(21) $\frac{d}{dx}(\sin^{-1}x) = \frac{1}{\sqrt{1-x^2}}$

(22) $\frac{d}{dx}(\cos^{-1}x) = -\frac{1}{\sqrt{1-x^2}}$

(23) $\frac{d}{dx}(\tan^{-1}x) = \frac{1}{1+x^2}$

(24) $\frac{d}{dx}(\cot^{-1}x) = -\frac{1}{1+x^2}$

(25) $\frac{d}{dx}(\sec^{-1}x) = \frac{1}{x\sqrt{x^2-1}}$

(26) $\frac{d}{dx}(\mathrm{cosec}^{-1}x) = -\frac{1}{x\sqrt{x^2-1}}$

(27) $\frac{d}{dx}(uv) = u\frac{dv}{dx} + v\frac{du}{dx}$

(28) $\frac{d}{dx}\left(\frac{u}{v}\right) = \frac{v\frac{du}{dx} - u\frac{dv}{dx}}{v^2}$

Chain Rule:-

$\frac{dy}{dx} = \frac{dy}{dw}\cdot\frac{dw}{dz}\cdot\frac{dz}{dx}$