

$$\int \frac{\sec^2 x}{\csc^2 x} \left| \frac{\operatorname{sech}^2 x}{\operatorname{csch}^2 x} \right. = \frac{x}{-x} \left| \frac{x}{-\coth x} \right.$$

$$2 \int \sqrt{-1:0:1}^{1/2} = 2 \int \sqrt{1-\xi^2} = x \sqrt{1-x^2} + x$$

$$x = t \Rightarrow \sqrt{1-x^2} = \sqrt{t^2} = t$$

$$t = x \Rightarrow \frac{dx}{dt} = \frac{t}{x} = t$$

$$\begin{aligned} \int \frac{d}{dt} t^2 - t \frac{d}{dt} t &= \int \frac{d}{dt} t^2 - t \frac{d}{dt} t = \int 2t - t = \int t \\ &= \int t = \frac{t^2}{2} = \frac{x^2}{2} \\ \Rightarrow 2 \int \sqrt{1-\xi^2} &= 2 \int \frac{d}{dt} t^2 = 2 \int t = t^2 = x^2 \end{aligned}$$

$$\int \frac{\sqrt{1-x^2}}{\sqrt{1-x^2}} \left| \frac{\sqrt{x^2+1}}{\sqrt{x^2-1}} \right. = \frac{x}{-x} \left| \frac{x}{x} \right.$$

$$\int \frac{2}{\sqrt{1-4x^2}} = \frac{2x}{\sqrt{1-4x^2}}$$

$$\int \frac{1}{\sqrt{5x^2 - 6x - 6}} = \frac{2x-5}{\sqrt{5x^2 - 6x - 6}}$$

$$\int \frac{1}{\sqrt{2-2x-x^2}} = \frac{(x+1)/\sqrt{3}}{\sqrt{2-2x-x^2}}$$

$$\int \frac{\sqrt{3}}{\sqrt{5-3x^2}} = \frac{\sqrt{3}x/\sqrt{5}}{\sqrt{5-3x^2}}$$

$$\int_{dx}^{-3|3} \frac{1}{\sqrt{9-x^2}}; \int_{dx}^{0|3} \frac{1}{\sqrt{9-x^2}}$$

$$\int \frac{()}{\sqrt{1-()^2}} = -\sqrt{1-x^2}$$

$$\int \frac{9() - 13}{\sqrt{-()^2 - 5() - 6}} = -9\sqrt{-x^2 - 5x - 6} - \frac{71}{2} 2x+5 \cancel{\text{✗}}$$

$$\int \frac{2() + 7}{\sqrt{4-()^2}} = -2\sqrt{4-x^2} + 7^{x/2} \cancel{\text{✗}}$$

$$\int \frac{7() + 10}{\sqrt{4() - ()^2}} = -7\sqrt{4x - x^2} + 24^{(x-2)/2} \cancel{\text{✗}}$$

$$\int \frac{3() + 5}{\sqrt{5-4() - ()^2}} = -3\sqrt{5-4x-x^2} - \frac{(x+2)^3}{3} \cancel{\text{✗}}$$

$$\int \frac{5() - 11}{\sqrt{20+4() - ()^2}} = -5\sqrt{20+4x-x^2} - \frac{\sqrt{6}(x-2)^{12}}{12} \cancel{\text{✗}}$$

$$\sqrt{a^2 - x^2}$$

$$\int \sqrt{8-()^2} = \frac{x}{2}\sqrt{8-x^2} + 4^{\sqrt{2}x/4} \cancel{\text{✗}}$$

$$\int \sqrt{2+5() - 3()^2} = \frac{6x-5}{12}\sqrt{2+5x-3x^2} + \frac{49\sqrt{3}}{72} (6x-5)^{7/3} \cancel{\text{✗}}$$

$$\int \sqrt{45+4() - ()^2} = \frac{x-2}{2}\sqrt{45+4x-x^2} + \frac{49}{2} (x-2)^{7/3} \cancel{\text{✗}}$$

$$\int \frac{3()^2}{\sqrt{5-4()}} = -\frac{3x}{8}\sqrt{5-4x^2} + \frac{15}{16} 2x/\sqrt{5} \cancel{\text{✗}}$$

$$\frac{x^2}{\sqrt{a^2 - x^2}}$$

$$\int \frac{7()^2 + 1}{\sqrt{9 - ()^2}} = -\frac{7x}{2} \sqrt{9 - x^2} + \frac{65}{2} x^{3/3} \cancel{\text{✗}}$$

$$\int \frac{3 - 2()^2}{\sqrt{1 - 4()^2}} = \frac{x}{4} \sqrt{1 - 4x^2} + \frac{11}{8} 2x \cancel{\text{✗}}$$

$$\int \frac{()^2 + 2() - 1}{\sqrt{5 - 2() - ()^2}} = -\frac{x+1}{2} \sqrt{5 - 2x - x^2} + \frac{(x+1)/\sqrt{6}}{\cancel{\text{✗}}}$$

$$\int \frac{2()^2 + () + 5}{\sqrt{3 + 2() - ()^2}} = -(x+4) \sqrt{3 + 2x - x^2} + 12^{(x-1)/2} \cancel{\text{✗}}$$

$$\int \frac{()^3 + 2() + 1}{\sqrt{4() - ()^2}} = -\left(\frac{1}{3}x^2 + \frac{5}{3}x + 12\right) \sqrt{4x - x^2} + 25^{(x-2)/2} \cancel{\text{✗}}$$

$$\int \frac{1}{()^3 \sqrt{3 + 2() - ()^2}} = \frac{x-1}{6x^2} \sqrt{3 + 2x - x^2} - \frac{\sqrt{3}}{18} \frac{\sqrt{3 + 2x - x^2} + \sqrt{3} + x/\sqrt{3}}{\sqrt{3 + 2x - x^2} - \sqrt{3} - x/\sqrt{3}} \cancel{\text{✗}}$$

$$\int \frac{1}{()^2 \sqrt{1 - ()^2}} = -\frac{\sqrt{1 - x^2}}{x}$$

$$\int \frac{1}{()^2 \sqrt{9 - ()^2}} = -\frac{\sqrt{9 - x^2}}{9x}$$

$$\int \frac{2()}{\sqrt{1 - ()^4}} = x^2 \cancel{\text{✗}}$$