$$
\begin{aligned}
& \text { (ex,9) } \int x \sqrt{2-x} d x \\
& =-1 \int_{2-u} \underbrace{x \sqrt{2-x}}_{\sqrt{u}} \underbrace{(-1) d x}_{d u} \\
& =-\int(2-u)^{2} \sqrt{u} d u=-\int\left(2 u^{1 / 2}-u^{3 / 2}\right) d u \\
& =-\left(2\left(\frac{2}{3}\right) u^{\frac{3}{2}}-\frac{2}{5} u^{u} u^{\frac{5}{2}} d u=-1 d x\right. \\
& =-\frac{4}{3} u^{\frac{3}{2}}+\frac{2}{5} u^{\frac{5}{2}}+c \quad u=2-x \\
& =-\frac{4}{3}(2-x)^{\frac{3}{2}}+\frac{2}{5}(2-x)^{\frac{5}{2}}+c
\end{aligned}
$$

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$$
\begin{aligned}
& \text { ex.10) } \frac{1}{4} \int_{1}^{2} 4 \underbrace{x^{3}}_{d n} \sqrt{\sqrt[3]{x^{4}+5}} d x \\
& u=x^{4}+5 \\
& d u=4 x^{3} d x \\
& =\frac{1}{4} \int_{6}^{21} \sqrt{n} d n \\
& \left\{\begin{array}{l}
\text { When } x=1, n=1^{4}+5=6 \\
\text { when } x=2, u=24+5=21
\end{array}\right. \\
& =\left.\frac{1}{4}\left(\frac{2}{3} u^{\frac{3}{2}}\right)\right|_{6} ^{21}=\frac{1}{4}\left(\frac{2}{3}(21)^{\frac{3}{2}}-\frac{2}{3}(6)^{\frac{3}{2}}\right) \\
& =\frac{1}{4}\left(\frac{2}{3}\right)\left(21^{\frac{3}{2}}-6^{\frac{3}{3}}\right) \\
& =\frac{1}{6}\left(21^{\frac{3}{2}}-6^{\frac{3}{3}}\right) \\
& \text { ex.11 }-\int_{0}^{15}-\frac{t}{\underbrace{e^{4}}_{d n}} \frac{e^{-\frac{t^{2}}{2}}}{e^{n}} d t \\
& -\int_{0}^{-112.5} e^{u} d u \\
& =-\left.\left(e^{4}\right)\right|_{0} ^{-12,5}=-\left(e^{-12,5}-e^{0}\right) \\
& =-e^{-1 / 2.5}+1 \\
& \text { p. } 400-401 \\
& 1,3,5,9,11,13,17,27 \\
& 31-34,37-40 \text {, } \\
& 41-44(\text { pantsab) } \rightarrow \text { ore esthmete } \rightarrow \text { mildpoint, } n=50
\end{aligned}
$$

