

$$\begin{aligned} \int 7 \cos^2 x \tan^3 x \, dx &= 7 \int \frac{\sin^3 x}{\cos x} \, dx \stackrel{c}{=} 7 \int \frac{(1 - u^2)(-du)}{u} = 7 \int \left[\frac{-1}{u} + u \right] \, du \\ &= -7 \ln |u| + \frac{7}{2}u^2 + C = \frac{7}{2} \cos^2 x - 7 \ln |\cos x| + C \end{aligned}$$