

#6
fixed
signs

$$\begin{aligned} & 2 \int \sin^2(u) \sin(u) \, du \\ &= 2 \int (1 - \cos^2(u)) \sin(u) \, du \\ &= 2 \int \sin(u) \, du + 2 \int \cos^2(u) (-\sin(u)) \, du \\ &= -2 \cos \sqrt{x} + \frac{2}{3} \cos^3(\sqrt{x}) + C \end{aligned}$$