$$\begin{aligned}\int_1^{16} \frac{x-3}{\sqrt{x}}\,dx &= \int_1^{16} \left(\frac{x}{\sqrt{x}} - \frac{3}{\sqrt{x}}\right) dx = \int_1^{16} (x^{1/2} - 3x^{-1/2})\,dx = \left[\tfrac{2}{3}x^{3/2} - 6x^{1/2}\right]_1^{16} \\ &= \left(\tfrac{2}{3}\cdot 64 - 6\cdot 4\right) - \left(\tfrac{2}{3} - 6\right) = \frac{56}{3} - (-\frac{16}{3}) = 24\end{aligned}$$