$f := t \to [\sin^3(t), \cos^3(t)]$

$$t \to [\sin(t)^3, \cos(t)^3] \quad \textbf{(1)}$$

$diff(f(t), t)$

$$[3\sin(t)^2\cos(t), -3\cos(t)^2\sin(t)] \quad \textbf{(2)}$$

$grad := \sqrt{(\%_1)^2 + (\%_2)^2}$

$$3\sqrt{\sin(t)^4\cos(t)^2 + \cos(t)^4\sin(t)^2} \quad \textbf{(3)}$$

$\int grad\, dt$

$$\frac{3}{4}\,\frac{\sqrt{4}\,\sin(t)\sqrt{(1-\cos(t)^2)\cos(t)^2}}{\cos(t)} \quad \textbf{(4)}$$

$\int_0^{\pi} grad\, dt$

$$3 \quad \textbf{(5)}$$