W04 Stepwise

01

☑ **Arc length - reversed x and y roles**

Find the arc length of the curve that satisfies the equation $x = \frac{1}{12}y^3 + y^{-1}$ over $y \in [1, 2]$.

✎ Surface area: revolved cubic

The curve $y = x^3$ over $x \in [0, 2]$ is revolved around the *x-axis*.

Find the area of the resulting surface.