Surface Area Worksheet

Thomas R. Cameron

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1 Exercises

I. Find the surface area of the surface of revolution formed by taking the curve $y = x^3$ over $[0, 1]$ and revolving it about the x-axis.

II. Find the surface area of the surface of revolution formed by taking the curve $y = x^2$ over $[1, 2]$ and revolving it about the y-axis.

III. Find the surface area of the surface of revolution formed by taking the curve $x = \sqrt{9 - y^2}$, for $-2 \leq y \leq 2$, and revolving it about the y-axis.