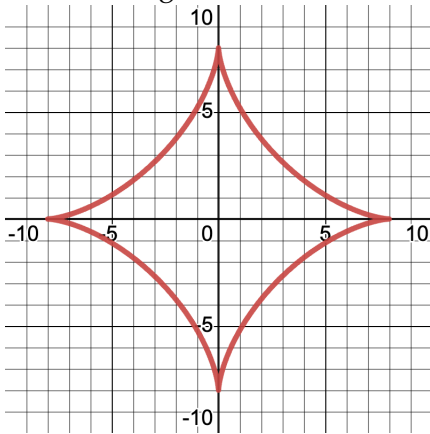




4. Find the surface area of the surface of revolution from rotating  $y = x^2$  from  $x = 0$  to  $x = 1$  around the  $y$ -axis.

5. Find the length of the curve  $x^{2/3} + y^{2/3} = 4$  (graphed below).



6. Now do triage. Which of the integrals in problems 1 through 5 can actually be computed by hand? Try those. For the others, go online and use your favorite tool to compute values for the definite integrals.