

**Quiz****Name**

1. Find the volume of the solid obtained by rotating the graph of  $f(x) = \sqrt{x}$  with  $4 \leq x \leq 9$  one complete revolution about the  $x$ -axis.

2. Express as a definite integral the length of the graph of  $f(x) = x^2$  between  $(-2, 4)$  and  $(3, 9)$ .