## Quiz

## Name

1. Calculate an approximation of $\int_{1}^{6} x^{2} d x$ by using the process in the definition of the integral with $n=5$. Then calculate the exact value of the integral using the fundamental theorem of calculus.

2 Relying on the circle $x^{2}+y^{2}=9$, sketch the graph of the function $f(x)=\sqrt{9-x^{2}}$ in the space below.


Making use of this circle, evaluate $\int_{0}^{3} \sqrt{9-x^{2}} d x$.

