
Name: _____



1. Find the derivative of the function $F(x) = \int_1^x \frac{\cos(t) \ln(t^2 + 7)}{t^5 + e^t} dt$.

2. $\int_1^4 \frac{1}{\sqrt{x}} dx =$

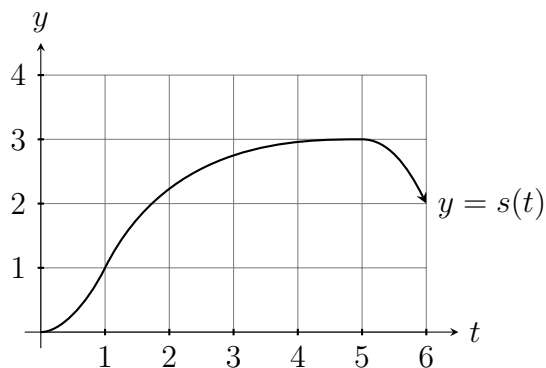
3. $\int_0^1 \frac{1}{1+x^2} dx =$

4. Find the area under the graph of $y = x^3 + 1$ between $x = 0$ and $x = 2$.

5. An object moving on a line has position $s(t)$ and velocity $v(t)$ at time t .
The position function $s(t)$ is graphed below.

(a) $\int_1^6 v(t) dt =$

- (b) What does your answer to part (a) mean?



Name: _____

1. Find the area under the graph of $y = 3\sqrt{x}$ between $x = 0$ and $x = 9$.

2. $\int_0^1 \frac{1}{\sqrt{1-x^2}} dx =$

3. $\int_0^2 \left(\frac{x^2}{3} + 2x + 1 \right) dx =$

4. Find the derivative of the function $F(x) = \int_1^x \frac{t^5 + \sin(\pi t)}{e^t} dt$.

5. An object moving on a line has position $s(t)$ and velocity $v(t)$ at time t .
The position function $s(t)$ is graphed below.

(a) $\int_5^6 v(t) dt =$

- (b) What does your answer to part (a) mean?

