Name _____ Quiz 6

1) Find the indefinite integral below.

$$\int \sin(5x)\,dx = -\frac{\cos(5x)}{5} + C$$

Or do a u-substitution with $u = 5x$.

2) Find the definite integral below.

$$\int_1^3 x^2 dx = \frac{x^3}{3}\Big|_1^3 = \frac{3^3}{3} - \frac{1^3}{3} = 9 - \frac{1}{3} = 8.\bar{6}$$

3) Use the graph below to find the integral below.

$$\int_1^6 f(x)dx = -\frac{1}{2}\cdot 1 \cdot 1 = -\frac{1}{2}$$