

**Evaluate each definite integral using the Fundamental Theorem of Calculus.**

1)  $\int_{-1}^2 (x^3 - 2x^2 - 1) dx$

2)  $\int_0^{\frac{\pi}{4}} 2\sec^2 x dx$

3)  $\int_{-\frac{3\pi}{4}}^{-\frac{\pi}{2}} -2\csc x \cot x dx$

4)  $\int_0^{\frac{\pi}{4}} -\sec x \tan x dx$

5)  $\int_{-1}^0 (-x^5 + 3x^3 - x) dx$

6)  $\int_{-4}^{-2} \frac{2}{x} dx$

7)  $\int_0^3 (x^3 - 3x^2 + 5) dx$

8)  $\int_1^3 \frac{4}{x^3} dx$

9)  $\int_{-2}^2 (-x^4 + 4x^2 - x - 3) dx$

10)  $\int_1^2 \frac{4}{x^2} dx$

$$11) \int_{-2}^1 (-x^4 - x^3 + 4x^2 - 2) dx$$

$$12) \int_{-1}^0 -3e^x dx$$

$$13) \int_{-2}^1 -2e^x dx$$

$$14) \int_1^2 -\frac{4}{x} dx$$

$$15) \int_{-5}^{-2} \frac{3}{x^2} dx$$

$$16) \int_0^1 (x^5 - 3x^3 + 2x + 3) dx$$

$$17) \int_{-\frac{\pi}{4}}^{-\frac{\pi}{6}} -\sin x dx$$

$$18) \int_1^4 \frac{3}{x} dx$$

$$19) \int_{-1}^1 (-x^5 + 2x^3 + 3) dx$$

$$20) \int_0^1 (x^5 - 3x^3 + x - 1) dx$$