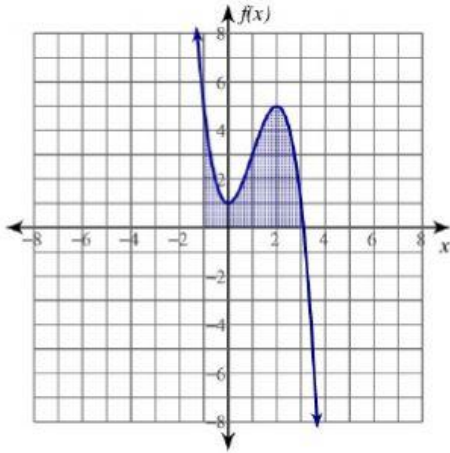


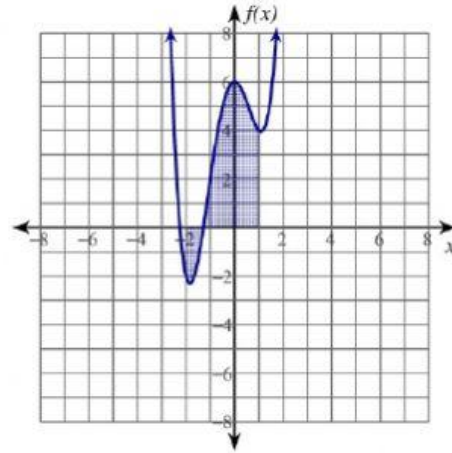
Fundamental Theorem of Calculus

Evaluate each definite integral.

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



$$2) \int_{-2}^1 (x^4 + x^3 - 4x^2 + 6) dx$$



$$3) \int_1^3 (2x^2 - 12x + 13) dx$$

$$4) \int_0^3 (-x^3 + 3x^2 - 2) dx$$

$$5) \int_{-1}^0 (x^5 - 4x^3 + 4x + 4) dx$$

$$6) \int_{-3}^0 4x^{\frac{1}{3}} dx$$

$$7) \int_{-4}^{-1} -\frac{4}{x^3} dx$$

$$8) \int_{-3}^{-1} \frac{4}{x} dx$$

$$9) \int_{\sqrt{2}}^2 \frac{1}{x\sqrt{x^2-1}} dx$$

$$10) \int_{-1}^2 \frac{2}{(2x+4)^3} dx$$

$$11) \int_{-4}^{-2} (-x + |-3x-9|) dx$$

$$12) \int_{-5}^1 -|x^2+4x| dx$$