

1.) Approximate $\int_0^6 e^x dx$ using

(a) 3 inscribed rectangles of equal width.

(b) 3 circumscribed rectangles of equal width.

2.) Approximate $\int_{-2}^2 (x^2 - 4) dx$ using

(a) 4 inscribed rectangles of equal width.

(b) 4 circumscribed rectangles of equal width.

3.) Approximate $\int_0^{\frac{\pi}{2}} \cos(x) dx$ using

(a) 2 inscribed rectangles of equal width.

(b) 2 circumscribed rectangles of equal width.