Opgave 357

Opgave A)

$$\int_0^1 x^3 \, dx$$

$$F(x) = \frac{1}{4}x^4$$

$$F(b) - F(a)$$
$$F(1) - F(0)$$
$$\frac{1}{4} - 0 = \frac{1}{4}$$

Opgave B)

$$\int_{-1}^0 x^3 \, dx$$

$$F(x) = \frac{1}{4}x^4$$
$$F(b) - F(a)$$
$$F(-1) - F(0)$$
$$-\frac{1}{4} - 0 = -\frac{1}{4}$$

Opgave C)

$$\int_{-1}^1 x^3 \, dx$$

$$F(x) = \frac{1}{4}x^4$$
$$F(1) - F(-1)$$
$$\frac{1}{4} - \left(-\frac{1}{4}\right) = 0$$