<u>תרגיל 4</u>

$$\int xe^{-x}dx$$
 .1

$$\int e^{2x} \sin^2 x dx$$
 .2

$$\int x^3 \sqrt{9 - x^2} dx \qquad .3$$

$$\int \frac{1}{\sqrt{2x-3}} dx$$
 .4

$$\int x^7 \sqrt{5 + 3x^4} dx$$
 .5

$$\int \frac{x^3 e^{x^2}}{(x^2+1)^2} dx$$
 .6

$$\int \sin^6 x \cos^2 x dx = 7$$

$$\int \frac{\cos 2x}{\cos^2 x \sin^2 x} dx \quad .8$$

$$\int \frac{1}{1+\sin x + \cos x} dx \quad .9$$

$$\int \frac{\sin 2x}{1+\sin^2 x} dx ^{-10}$$

$$\int \frac{1}{x^2 - a^2} \mathrm{d}x . 11$$

$$\int \frac{x^4}{x^4 - 1} \mathrm{d}x . 12$$

$$\int \frac{x^3 + 3x^2 + 5x + 7}{x^2 + 2} dx$$
 .13

$$\int \frac{x^5}{(x^3+1)(x^3+8)} dx^{-14}$$

$$\int \cos 3x \cos 2x \ ^{.15}$$

$$\int \cos x \cos 2x \cos 4x$$
 .16

$$\int \tan^2 x$$
 .17