

$$\int x \cdot e^x dx$$

$$(-1+x) e^x \quad (1)$$

$$\int (x+1) \cdot e^x dx$$

$$x e^x \quad (2)$$

$$\int (5x-9) \cdot e^{-3x} dx$$

$$-\frac{1}{9} (-22 + 15x) e^{-3x} \quad (3)$$

$$\int (6x+3) \cdot e^{-2x} dx$$

$$-3 e^{-2x} (1+x) \quad (4)$$

$$\frac{-3+2x}{e^x} \quad (5)$$

$$\operatorname{evalf}\left[\int_0^1 \left(\frac{1-x}{3-e^x}\right) dx\right]$$

$$0.1226264804 \quad (6)$$

$$\operatorname{evalf}\left[\int_1^4 \ln(2x) dx\right]$$

$$4.624618987 \quad (7)$$

$$\operatorname{evalf}\left[\int_1^2 \ln(5x) dx\right]$$

$$1.995732273 \quad (8)$$

$$\int x \cdot \ln(x) dx$$

$$\frac{1}{2} x^2 \ln(x) - \frac{1}{4} x^2 \quad (9)$$

$$\int x^2 \cdot \ln(x) dx$$

$$\frac{1}{3} x^3 \ln(x) - \frac{1}{9} x^3 \quad (10)$$

$$\int -6x \cdot \cos(5x) dx$$

$$-\frac{6}{25} \cos(5x) - \frac{6}{5} x \sin(5x) \quad (11)$$

$$\int 9x \cdot \sin(2x) dx$$

$$\frac{9}{4} \sin(2x) - \frac{9}{2} x \cos(2x) \quad (12)$$

$$8 \sin(x) - 8x \cos(x) \quad (13)$$

$$\int -11x \cdot \cos(x) dx \quad -11 \cos(x) - 11x \sin(x) \quad (14)$$

$$\int -6x^2 \cdot \cos(8x) dx \quad -\frac{3}{4} x^2 \sin(8x) + \frac{3}{128} \sin(8x) - \frac{3}{16} x \cos(8x) \quad (15)$$

$$\int 10x^2 \cdot \sin\left(\frac{x}{2}\right) dx \quad -20x^2 \cos\left(\frac{1}{2}x\right) + 160 \cos\left(\frac{1}{2}x\right) + 80x \sin\left(\frac{1}{2}x\right) \quad (16)$$

$$\int x^2 e^x dx \quad (2-2x+x^2) e^x \quad (17)$$

$$\int x \ln(\sqrt{x}) dx \quad \frac{1}{4} x^2 \ln(x) - \frac{1}{8} x^2 \quad (18)$$

$$\int x e^x dx \quad -(1+x) e^x \quad (19)$$

$$\int x \cdot (\sec(x))^2 dx \quad x \tan(x) + \ln(\cos(x)) \quad (20)$$

$$\int \ln(2x+3) dx \quad \frac{1}{2} \ln(2x+3) (2x+3)^{-x} - \frac{3}{2} \quad (21)$$

$$\int \sin(\ln(x)) dx \quad -\frac{1}{2} \cos(\ln(x)) x + \frac{1}{2} \sin(\ln(x)) x \quad (22)$$