

## ZESTAW ZADAŃ VIII

**Zadanie 1** Oblicz całki nieoznaczone przez podstawienie:

- (a)  $\int e^{-3x} dx$ , (b)  $\int \frac{dx}{\sin^2(1-3x)}$ , (c)  $\int \sqrt{3x+4} dx$ , (d)  $\int x(3x^2+1)^5 dx$ , (e)  $\int x^2 \sin(1-x^3) dx$ , (f)  $\int \frac{dx}{x \ln^2 x}$ ,  
(g)  $\int \frac{\sqrt{3-5} \operatorname{tg} x dx}{\cos^2 x}$ , (h)  $\int \frac{\cos x dx}{1+\sin^2 x}$ , (i)  $\int \sin^3 x dx$ , (j)  $\int \frac{e^{\frac{1}{x}} dx}{x^2}$ , (k)  $\int \frac{e^x dx}{\sqrt{1-e^{2x}}}$ , (l)  $\int \cos^2 x dx$ , (m)  $\int \frac{\arcsin^3 x dx}{\sqrt{1-x^2}}$ ,  
(n)  $\int (x+2)\sqrt{x-1} dx$ , (o)  $\int \left( \sqrt[3]{x+2} - \sqrt{x+2} \right) dx$ , (p)  $\int \frac{x^2 dx}{x^6+1}$ , (q)  $\int \frac{dx}{\sqrt{x}\sqrt{1-x}}$ , (r)  $\int \sqrt{4-x^2} dx$ .