OPAKOVACÍ LEKCE Z MATEMATIKY II

Jakou metodou mám řešit integrál?

1. $\displaystyle\int \sin x \cos x \, dx$

2. $\displaystyle\int \frac{\ln^2 t}{t} \, dt$

3. $\displaystyle\int x^2 \sin 2x \, dx$

4. $\displaystyle\int 4x^2 \sqrt{1 - x^3} \, dx$

5. $\displaystyle\int \ln^2 t \, dt$

6. $\displaystyle\int \frac{y}{y^2 + 1} \, dy$

7. $\displaystyle\int \frac{x}{x^4 + 1} \, dx$

8. $\displaystyle\int \frac{x}{\sqrt{x^2 + 1}} \, dx$

9. $\displaystyle\int \sin^3 z \, dz$

10. $\displaystyle\int \frac{\sqrt{x}}{1 + \sqrt{x}} \, dx$

11. $\displaystyle\int \frac{\cos^3 x}{\sin^2 x} \, dx$

12. $\displaystyle\int t \arctan t \, dt$

13. $\displaystyle\int \frac{1}{x - \sqrt[3]{x}} \, dx$

14. $\displaystyle\int x^2 \ln x \, dx$

15. $\displaystyle\int \frac{\sin x}{2 - \cos x} \, dx$

16. $\displaystyle\int x e^{-x} \, dx$

17. $\displaystyle\int \sqrt{1 - 2x} \, dx$

18. $\displaystyle\int 3s \sqrt{1 - s^2} \, ds$

19. $\displaystyle\int \frac{1}{x^2 - 2x + 1} \, dx$

20. $\displaystyle\int \frac{1}{x^2 - 2x + 2} \, dx$

21. $\displaystyle\int \frac{1}{x^2 - 2x - 3} \, dx$

22. $\displaystyle\int \frac{\tan p}{\cos p} \, dp$

23. $\displaystyle\int \frac{x^3}{x^2 - 1} \, dx$

24. $\displaystyle\int u e^{-u^2} \, du$