

Calculus II – Integration Practice

Professor:

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1. $\int (2t + 7)^{72} dt$
2. $\int y (\ln(y)) dy$
3. $\int \frac{x + 1}{x^2 + 6x} dx$
4. $\int \frac{1}{x^2 + 4x + 4} dx$
5. $\int \frac{x}{(1 + x^2)^2} dx$
6. $\int s e^{s^2} ds$
7. $\int \frac{r^3 + r^2 + 1}{r} dr$
8. $\int t \sin(t^2) dt$
9. $\int x \sin(x) dx$
10. $\int (t + 2)\sqrt{2 + 3t} dt$
11. $\int \frac{x^3 + 7x^2 + 10x + 1}{x^2 + 7x + 10} dx$
12. $\int e^y \cos(y) dy$
13. $\int \frac{p^2 + 2}{p^2 + p} dp$
14. $\int \frac{x^3 \sin(x)}{x \sin(x)} dx$
15. $\int \cos^4(t) dt$
16. $\int s^2 (1 + 2s^3)^2 ds$
17. $\int \sin^3(x) dx$
18. $\int \sin(x) \sec(x) dx$ – remember $\sec(x) = \frac{1}{\cos(x)}$
19. $\int \sec^2(y) dy$ – try $u = \tan(x)$ as your substitution.
20. $\int x^2 e^x dx$