

Lecture 10: Practice With Integrals

Lecturer: Sarah Arpin

Evaluate the following integrals.

1. $\int \cot(10x) \csc^4(10x) dx$

2. $\int x^3(4x^2 - 1)^{5/2} dx$

3. $\int \sqrt{1-7w^2} dw$

4. $\int \frac{1}{\sqrt{9x^2-36x+37}} dx$

$$5. \int_{-1}^0 \frac{t^2+7t}{(t+2)(t-1)(t-4)} dt$$

$$6. \int \frac{4x-11}{x^3-9x^2} dx$$

7. $\int \frac{x^5}{x^4+5x^2+4} dx$