

## Math 31 – Workshop #2

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Compute the following integrals.

1.  $\int_e^{e^2} \frac{1}{x \ln x} dx$

2.  $\int \frac{\sqrt{\arcsin x}}{\sqrt{1-x^2}} dx$

3.  $\int \tan x dx$

4.  $\int_{\frac{1}{\pi}}^{\frac{2}{\pi}} \frac{\sin(\frac{2}{x})}{x^2} dx$

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

6.  $\int \frac{\sqrt{e^{-x} - 2}}{e^x} dx$

7.  $\int \frac{\cos x + \sin x}{\cos x - \sin x} dx$

8.  $\int \frac{\cos(3x)}{\sin^4(3x)} dx$

9.  $\int \frac{\sec(\sqrt[3]{x}) \tan(\sqrt[3]{x})}{\sqrt[3]{x^2}} dx$

10.  $\int \frac{\sqrt{1 + \tan x}}{\cos^2 x} dx$