

MAT 115 Worksheet 16

Tuesday, Nov 28 2017

Important info: Welcome to the MAT 115 workshop! My name is **Diego Avalos** (avalosgalvez@cpp.edu), and I will be your workshop facilitator. We meet on Tuesdays and Thursdays from 4 to 5:50 pm in room 4-1-314. All worksheets and solutions may be found at the website www.diegoavalos.net/teaching/mat115workshop2017.

Compute the following integrals using any method learned in MAT 115.

1. $\int \frac{1}{(3+x^2)^{3/2}} dx$

2. $\int_0^{\pi/4} \tan^7 x dx$

3. $\int \sin^2 2x \cos^3 2x dx$

4. $\int e^{2x} \cos 3x dx$

5. $\int_4^8 \frac{\sqrt{x-4}}{x} dx$

6. $\int \frac{1}{\sqrt{e^x+1}} dx$

7. $\int_0^{1/2} \sin^{-1} x dx$

8. $\int \frac{\cos x}{\sin^2 x - 6 \sin x + 12} dx$

9. $\int_0^{\ln 2} \sqrt{e^x - 1} dx$

10. $\int \frac{1}{\sqrt{x} + \sqrt[3]{x}} dx$