

MTH 1126 - Test #3 - 11am Class  
SPRING 2024

Pat Rossi

Name \_\_\_\_\_

Show **CLEARLY** how you arrive at your answers.

1.  $\int \frac{x-25}{x^2-x-12} dx =$

2.  $\lim_{x \rightarrow 0} \frac{1-\cos(x)}{x} =$

3.  $\int \frac{4x^2+2x+48}{x^3+16x} dx =$

4.  $\int \sin^3(x) \cos^4(x) dx =$

5.  $\int \frac{1}{x\sqrt{9x^2+1}} dx =$

6.  $\lim_{x \rightarrow +\infty} \frac{\ln(x)}{x^2} =$

7.  $\int x \cos(2x) dx =$

WOW! Extra (10 pts - all or nothing)

$$\int \frac{\sqrt{x^2-16}}{x} dx =$$

WOW! Extra (5 pts - all or nothing)

$$\int \frac{x}{x+9} dx =$$