Math 121   Self-Assessment Quiz #3B   September 17, 2021

• Please see the course webpage for the answer key.

1. Compute $\displaystyle\int x^4 \arcsin x \; dx =$

2. Show that $\displaystyle\int_0^{\frac{\pi}{2}} \frac{\cos x}{\left(\sin^2 x + 1\right)^{\frac{7}{2}}} \; dx = \frac{43}{60\sqrt{2}}$

3. Compute $\displaystyle\int \frac{1}{\left(x^2 + 4\right)^2} \; dx =$