

1. Find  $\int \sec^6 x \, dx$

Answer: \_\_\_\_\_

2. True or False?

a) If  $\sec \theta = \frac{5}{3}$ , then  $\cot \theta = \frac{3}{4}$ .

Answer: \_\_\_\_\_

b)  $\int e^{x^2} \, dx = \frac{e^{x^2}}{2x}$

Answer: \_\_\_\_\_

3. Find  $\int_0^{\pi/2} e^x \cos x \, dx$

Answer: \_\_\_\_\_