

Math for Data Analytics: Activity

QBS 103

August 27, 2024

Activity These are 2 practice problems from a BC calculus test. Typeset the expressions and then use R to solve the problems.

```
knitr::include_graphics("Practice1.png")
```

5. $\int_0^{\frac{\pi}{2}} \sin^5 x \cos x \, dx =$

(A) $\frac{1}{6}$

(B) $-\frac{1}{6}$

(C) 0

(D) -6

(E) 6

```
knitr::include_graphics("Practice2.png")
```

40. $\int_0^4 \frac{dx}{\sqrt{9+x^2}} =$

(A) $\ln 3$

(B) $\ln 4$

(C) $-\ln 2$

(D) $-\ln 4$

(E) Undefined