

CALCULUS

Properties of the definite integral

NEW

Which of the following is true?

a. $\int_{\pi/2}^{3\pi/2} \cos^7 x \leq 0$

b. $\int_{\pi/2}^{3\pi/2} \cos^7 x \geq 0$

Explain your choice, invoking the properties of integrals.

Which of the following is true?

a. $\int_{-3}^{-2} e^{-x} dx \leq \int_{-3}^{-2} e^{-2x} dx$

b. $\int_{-3}^{-2} e^{-x} dx \geq \int_{-3}^{-2} e^{-2x} dx$

Explain your choice, invoking the properties of integrals.