

CALCULUS
Properties of the definite integral
OLD2

0630-1.
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Which of the following is true?

a. $\int_{2\pi}^{3\pi} \sin^5 x \leq 0$

b. $\int_{2\pi}^{3\pi} \sin^5 x \geq 0$

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.