QUESTION

A damped free response of a spring-mass-damper system is given by the differential equation

$$2\ddot{x} + c\dot{x} + 5x = 0$$

The value of c for which the response would be non-oscillatory (overdamped) satisfies

    (A) $c < \sqrt{40}$

    (B) $c \geq \sqrt{40}$

    (C) $c < 40$

    (D) $c \geq 40$

CONTRIBUTOR

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