Comparison Test

Question

Which of the following inequalities, if true, would help you decide the convergence or divergence of $\sum_{n=1}^{\infty} a_n$?

A. $a_n \leq \dfrac{1}{\sqrt{n}}$

B. $a_n \leq \dfrac{1}{n^2}$

C. $a_n \geq \dfrac{1}{\sqrt{n^3}}$

D. $a_n \geq \left(\dfrac{1}{2}\right)^n$