TOPIC
Mathematics

QUESTION
To find the value of π, a scientist inscribes a *n*-sided polygon in a circle of diameter 1. The perimeter of the regular polygon is the value of π for $n \to \infty$. The approximate value of π by using a 6-sided regular polygon is

(A) 3.000
(B) 3.142
(C) 3.232
(D) 3.464

HINT
The angle subtended by each side of the polygon is $\phi = \frac{2\pi}{n}$. The length of each side is $s = 2r \sin\frac{\phi}{2}$, where r is the radius of the circle.

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