

Question

Which of the following parametric curves does not trace out the unit circle?

A.
$$x = \cos(t), y = \sin(t), 0 \le t \le 2\pi$$

B. $x = \sin^2(t), y = \cos^2(t), 0 \le t \le 2\pi$
C. $x = \sin(t^2), y = \cos(t^2), 0 \le t \le \sqrt{2\pi}$
D. $x = \sin(2t), y = \cos(2t), 0 \le t \le \pi$