Question

Which scenario describes periodic behavior?

The movement of the hands on a clock

The takeoff and landing of a jet plane

The flight of a football during a pass

The path a dolphin swims in the ocean

Answer: The movement of the hands on a clock.

Remark. 'The path a dolphin swims in the ocean' sometimes describes periodic behavior.

Question

At which value will the graph of $y = \cot x$ have a zero?

$\dfrac{\pi}{3}$

$\dfrac{\pi}{2}$

$\dfrac{\pi}{4}$

None of the above are correct.

Answer: The graph of y=cot(x) will have a zero at $\dfrac{\pi}{2}$.