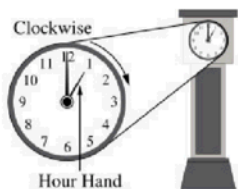


frq



Note: Figure not drawn to scale.

The figure shows a clock standing on a level floor with a close-up view of the clockface. The clockface has a 10-centimeter-long hour hand that moves as time passes. The center of the clockface is 200 centimeters from the floor. At time $t = 0$ hours, the hour hand is pointing directly up to the 12. The next time the hour hand points directly up to the 12 is at time $t = 12$ hours. As the hour hand moves, the distance of the endpoint of the hour hand from the floor periodically decreases and increases.

The sinusoidal function h models the distance, in centimeters, of the endpoint of the hour hand from the floor as a function of time t , in hours.