

362-363 #11 - 19 odd, 33, 34, 39, 40, 47, 49

Plus Application Problems below

1)

John is floating on a tube in a wave tank. At $t = 1$ second, John reaches a maximum height of 14m above the bottom of the pool. At $t = 9$ seconds, John reaches a minimum height of 2m above the bottom of the pool

a) Sketch a graph below which expresses John's height from the bottom of the pool with respect to time.

b) What is the equation (in terms of sine and cosine), which represents John's motion?

c) What is John's height from the bottom of the pool at 21 seconds?

