

HW 3.3 Answers

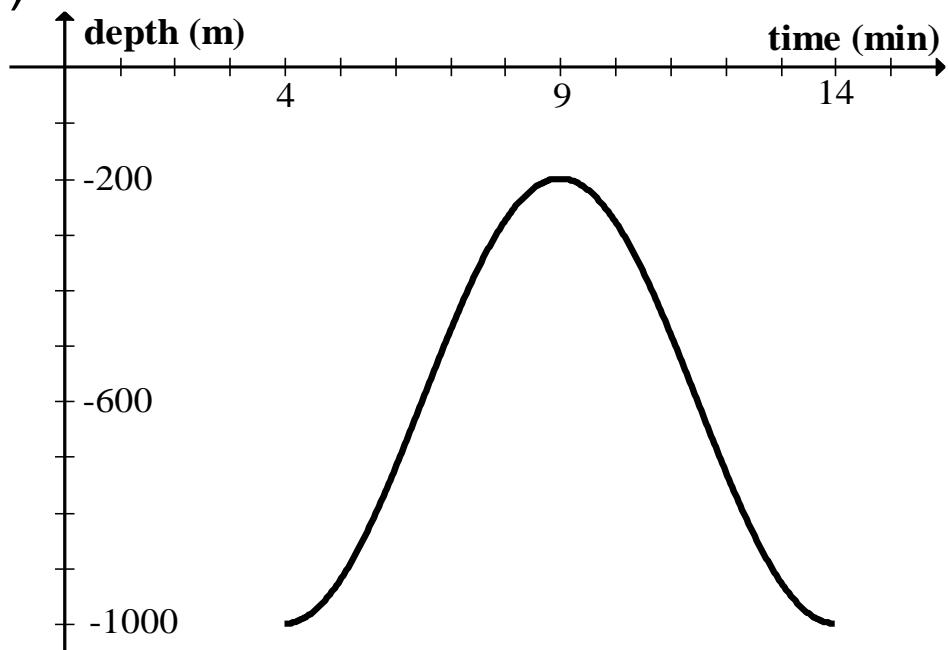
1. a) $y = 1.3 + .2 \cos \frac{\pi}{6}(x - 2)$

b) 1.4 m c) 1.13 m d) 8:00 am

2. a)

- b) $y = 4000 \cos \frac{\pi}{45}(x - 10)$ c) 1236.01 km south
d) 3064.18 km north e) 38.39 min.

3. a)



- b) $y = -600 + 400 \cos \frac{\pi}{5}(x - 9)$
- c) depth = 276.4 m, so it was not safe
- d) between .15 and 7,85 min

4 a)



- b) $y = 12 + 12 \cos \frac{1}{12}(x - 12\pi)$ c) 23.7 in
- d) 17.85 in, 57.55 in