

# Download File PDF Water Wave Mechanics For Engineers And Scientists Solution Manual

#Jenny



Finally I get this ebook, thanks for all these I can get now!

#Rio



Cool! I'am really happy

#Markus Jensen



I did not think that this would work, my best friend showed me this website, and it does! I get my most wanted eBook

#Hun Tsu



wtf this great ebook for free?!

#Che Salsa



My friends are so mad that they do not know how I have all the high quality ebook which they do not!

#Diego Butler



so many fake sites. this is the first one which worked! Many thanks

Work Examples  
Part 4: Fluids, Digital Ocean, Study, IT, Maths, Biz

**WORKED OUT EXAMPLES**

**Problem 1**  
A 10 second period wave having a height of 5m propagates from deep to shallow waters. Assuming that the bottom contours are parallel to each other, compute the wave height at a water depth of 10m.

**Solution**  
 $L_w = 1.56 T^2 = 1.56 \times 100 = 156 \text{ m}$   
 $\frac{d}{L_w} = 0.0642$   
Corresponding  $\frac{H}{L_w} = 0.1082$  (from wave table)  
 $C_g = \frac{L_w}{T} = 15.6 \text{ m/sec}$   
 $L = 92.4 \text{ m}, C = \frac{92.4}{10} = 9.24 \text{ m/sec}$   
 $K_1 = \frac{2\pi}{L} = 0.065, 2k_1 d = 2 \times 0.065 \times 10 = 1.31$   
 $n = \frac{1}{2} \left[ 1 + \frac{2k_1 d}{\sinh 2k_1 d} \right] = 0.88$   
 $\frac{H_1}{L_1} = n \frac{H_2}{L_2} \Rightarrow \frac{5}{156} = 0.88 \frac{H_2}{92.4} \Rightarrow H_2 = 4.91 \text{ m}$   
Therefore wave height  $H$  at  $d = 10\text{m}$  is  $0.9828 \times H_1 = 4.91 \text{ m}$

[Download PDF version of :](#)  
**Water Wave Mechanics For Engineers And Scientists Solution Manual**