M1-101

Q# Which formula could be correct for the speed *v* of ocean waves in terms of the density ρ of sea water, the acceleration of free fall g, the depth *h* in the ocean, and the wave length λ?

(Note: Unit for wave length λ is meter (m) and unit for density ρ is kg/m3)



Q2. The mass of a piece of card board is 20 g. Its length and width are 8.0 and 3.0 inches, respectively. If the thickness of the card board is 0.50 mm, what is the density of the card board in kg/m3?

(1 inch = 2.54 cm)

A) 2.58 × 103

B) 1.67 × 10−2

C) 1.67 x 10−3

D) 2.58 x 10−4

E) 2.45 x 105

M1-131

Q1.

Consider two uniform solid spheres A and B made of the same material and having radii rA

and rB, respectively. Find the ratio rB / rA if the mass of sphere B is five times the mass of

sphere A.

A) 1.7

B) 2.2

C) 2.7

D) 1.2

E) 3.3

Q2.



M1-132



T123



**T122**



T121



**T113**





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**T111**

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**T92**



**T091**



T082

