**Physics 20 - Lesson 21**

**Universal Gravitation**

possible 31 /26

1)



/3



2)

/3

3)



/3

One of the masses is doubled (x 2) and the distance is tripled (x )

Fg′ = 36 N (x 2)(x )

Fg′ = **8.0 N**



4)

/6

5)



/3

6)



/3

7)

m2 = 5 m1



/5

8)

Earth

mE

Moon

mM

object

mo

380 000 km

x

380 000 - x

FM

FE

bonus

/5

FE = FM





















x = 3.42 x 105 km