GENERAL PHYSICS I – Question Bank 2

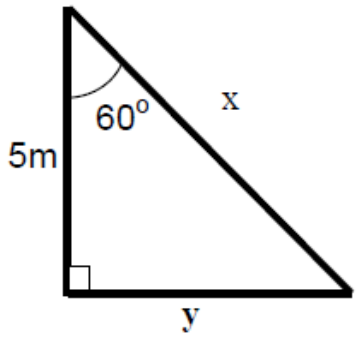
Subject: Coordinate systems

Question 1.

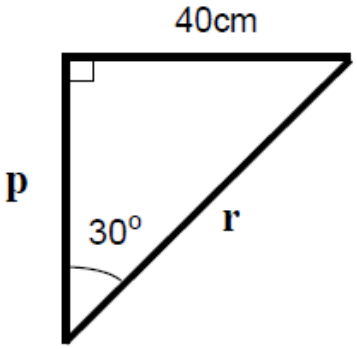
*If the rectangular coordinates of a point are given by (**x, 4**) and its polar coordinates are (**r, 60°**), determine x and **r**.*

Question 2.

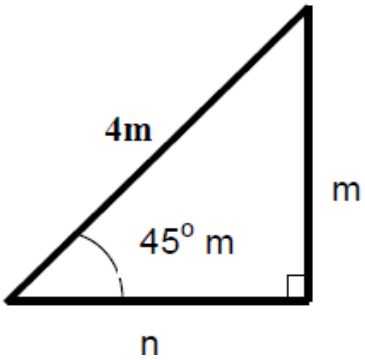
a) Find x and y in the figure below.



b) Find p and r in the figure below.



C) Find m and n in the figure below.



Useful Information:

($\sin 30 = \cos 60 = 1/2$; $\sin 60 = \cos 30 = \frac{\sqrt{3}}{2}$; $\sin 53 = \cos 37 = 4/5$; $\sin 37 = \cos 53 = 3/5$)

1 mm = 10^{-3} m 1 micrometre(μm) = 10^{-6} m 1 nanometre(nm) = 10^{-9} m