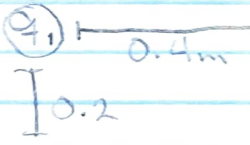
Física General

Potencial electrico

1.- Calcular el potencial electrico en el punto P de las sig. figuras:

a) 

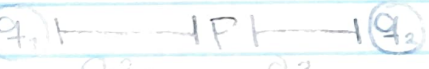
$+q_1 = 15\,nC$
$-q_2 = 9\,nC$

$$V = 9\times10^{9}\left(\frac{15\times10^{-9}}{0.4} - \frac{9\times10^{-9}}{0.2}\right) = -67.5\ v$$

b) 

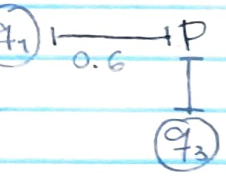
$-q_1 = 5\,nC$
$+q_2 = 8\,nC$

$$V = 9\times10^{9}\left(\frac{-5\times10^{-9}}{0.3} + \frac{8\times20^{-9}}{0.3}\right) = 90\ v$$

c) 

$-q_1 = 4\,nC$
$+q_2 = 12\,nC$

$$V = 9\times10^{9}\left(\frac{-4\times10^{-9}}{0.2} + \frac{12\times10^{-9}}{0.7}\right) = -23.7\ v$$

d) 

$-q_1 = 8\,nC$
$-q_2 = 6\,nC$
$+q_3 = 1\,nC$

$$V = 9\times10^{9}\left(\frac{-8\times10^{-9}}{0.6} - \frac{6\times10^{-9}}{0.45} + \frac{10\times10^{-9}}{0.3}\right) = 60\ v$$