

# Electric potential

## Worksheet

- 1- Calculate the electric potential due to a point charge [ $q=3\mu\text{C}$ ] at the points [ $A_1$  at  $r_1=0.25\text{ m}$ ] [ $A_2$  at  $r_2 = 0.045\text{m}$ ]

- 
- 2- As shown in the front figure, the two charges  $q_1 = 2\mu\text{C}$  and  $q_2 = -3\mu\text{C}$ .

The point A at 4.6 m from the (+) charge **A●**  
And 6 m apart from the (-) charge.  
Calculate the total potential at the point A.



- 
- 3- As shown in figure, three identical charges and they are separated by distances [ $a = 0.3\text{ m}$ ,  $\theta = 60^\circ$ ]  
If the potential at the head of the triangle is 20V,  
Calculate the magnitude of the charges [ $q_1, q_2$ , and  $q_3$ ]

