1. In what ratio, does x-axis divide the line segment joinin the points $\mathbf{A}(3,6)$ and $\mathbf{B}(-12,-3)$?

   (a) $1:2$ (c) $4:1$

   (b) $1:4$ (d) $2:1$

2. The distance between the point $(0,2\sqrt{5})$ and $(-2\sqrt{5},0)$ is

   (a) $2\sqrt{10}$ units (c) $2\sqrt{20}$ units

   (b) $4\sqrt{10}$ units (d) 0 units

3. if $(-5,3)$ and $(5,3)$ are two vetices of an equilateral triangle,then coordinates of the third vertex,given that origin lies inside the triangle $(take\sqrt{3}=1.7)$

4. show that the points $(-2,3)$, $(8,3)$ and $(6,7)$ are the verices of right-angled triangle

5. If $\mathbf{Q}=(0,1)$ is equidistant from $\mathbf{P}=(5,-3)$ and $\mathbf{R}=(x,6)$, find the value of x.

6. The distance of the point $(-6,8)$ from origin is :

   (a) 6 (c) 8

   (b) -6 (d) 10

7. The points $(-4,0)$ $(4,0)$ and $(0,3)$ are the vertices of a :

   (a) right triangle (c) equilateral triangle

   (b) isosceles triangle (d) scalene triangle