5. Find the distance d(P1, P2) between the points P1=(0,4) and P2=(2,-1)

$\sqrt{30}$

$\sqrt{31}$

$\sqrt{29}$

$4\sqrt{2}$

**Solution**

The distance $= \sqrt{(-1-4)^2+(2-0)^2}$

The distance $= \sqrt{(-5)^2+(2)^2}$

$= \sqrt{25+4}$

$= \sqrt{29}$