

1. Find the distance  $d(P_2, P_1)$  between the points  $P_2=(0,1)$  and  $P_1=(4,5)$

$$\sqrt{33}$$

$$\sqrt{34}$$

$$4\sqrt{2}$$

$$\sqrt{35}$$

**Solution**

$$\text{The distance} = \sqrt{(5-1)^2 + (4-0)^2}$$

$$\text{The distance} = \sqrt{(4)^2 + (4)^2}$$

$$= \sqrt{16+16}$$

$$= 4\sqrt{2}$$