

7. Find the distance $d(P_1, P_2)$ between the points $P_1=(3,6)$ and $P_2=(-2,1)$

$$\sqrt{51}$$

$$2\sqrt{13}$$

$$5\sqrt{2}$$

$$\sqrt{53}$$

Solution

$$\text{The distance} = \sqrt{(1-6)^2 + (-2-3)^2}$$

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

$$= \sqrt{25+25}$$

$$= 5\sqrt{2}$$