

2. Find the distance  $d(P_1, P_2)$  between the points  $P_1 = (5, -3)$  and  $P_2 = (-1, 6)$

$$\sqrt{118}$$

$$\sqrt{119}$$

$$3\sqrt{13}$$

$$2\sqrt{30}$$

**Solution**

$$\text{The distance} = \sqrt{(6 - (-3))^2 + (-1 - 5)^2}$$

$$\text{The distance} = \sqrt{(9)^2 + (-6)^2}$$

$$= \sqrt{81 + 36}$$

$$= 3\sqrt{13}$$