

8. Find the distance $d(P_2, P_1)$ between the points $P_2=(2,-2)$ and $P_1=(-3,0)$

$$\sqrt{30}$$

$$\sqrt{31}$$

$$\sqrt{29}$$

$$4\sqrt{2}$$

Solution

$$\text{The distance} = \sqrt{(0 - -2)^2 + (-3 - 2)^2}$$

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

$$= \sqrt{4+25}$$

$$= \sqrt{29}$$