

8. Find the distance $d(Y, T)$ between the points $Y=(2,-2)$ and $T=(6,-3)$

$$3\sqrt{2}$$

$$\sqrt{19}$$

$$\sqrt{17}$$

$$2\sqrt{5}$$

Solution

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

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

$$= \sqrt{1+16}$$

$$= \sqrt{17}$$