The diagram illustrates the distance (d) between two points $(x_1, y_1)$ and $(x_2, y_2)$ in a 2D coordinate system.

- The horizontal distance between the points is $x_2 - x_1$.
- The vertical distance between the points is $y_2 - y_1$.

The distance $d$ between the points can be calculated using the distance formula:

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$