

Subject: _____

Date: _____

Example

Name	x_1 Age	y_1 Gender	Sports liked		$K = 7$
Ali	32	M 1	Cricket	14.035	-
Sara	40	F 0	Football	22	-
Sajdar	16	M 1	Football	2.236	-
Hina	35	F 0	C	17	-
Jaleel	20	M 1	Neither	2.23	-
Raza	19	M 1	C	1.414	-
Tayyab	15	M 1	C	3.16	-
Tamoor	23	M 1	Neither	5.099	-
Ameela	10	F 0	F	8	-

new entry

Faswa	x_2 18	y_2 F 0	? Cricket
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$$= \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$= \sqrt{(32 - 18)^2 + (1 - 0)^2}$$

$$= \sqrt{(14)^2 + (1)^2}$$

$$= \sqrt{196 + 1} = \sqrt{197} = 14.035$$

$$= \sqrt{(40 - 18)^2 + (0 - 0)^2}$$

$$= \sqrt{(22)^2 + (0)^2}$$

$$= \sqrt{484 + 0} = \sqrt{484} = 22$$

$$= \sqrt{(16 - 18)^2 + (1 - 0)^2}$$

$$= \sqrt{(-2)^2 + (1)^2}$$

$$= \sqrt{4 + 1} = 2.236$$

$$= \sqrt{(35 - 18)^2 + (0 - 0)^2}$$

$$= \sqrt{(17)^2} = 17$$

$$\sqrt{(20 - 18)^2 + (1 - 0)^2}$$

$$= \sqrt{(2)^2 + 1} = \sqrt{5}$$

$$\sqrt{(19 - 18)^2 + (1 - 0)^2} = \sqrt{1 + 1}$$

$$\sqrt{2} = 1.414$$

$$\sqrt{(15 - 18)^2 + (1 - 0)^2} = \sqrt{(3)^2 + (1)}$$

$$= \sqrt{10} = 3.16$$

$$\sqrt{(23 - 18)^2 + (1 - 0)^2}$$

$$\sqrt{(5)^2 + (1)^2} = \sqrt{26} = 5.099$$

$$\sqrt{(10 - 18)^2 + (0 - 0)^2}$$

$$= \sqrt{64} = 8$$