

## Set Theory

### Answer the past BJC question

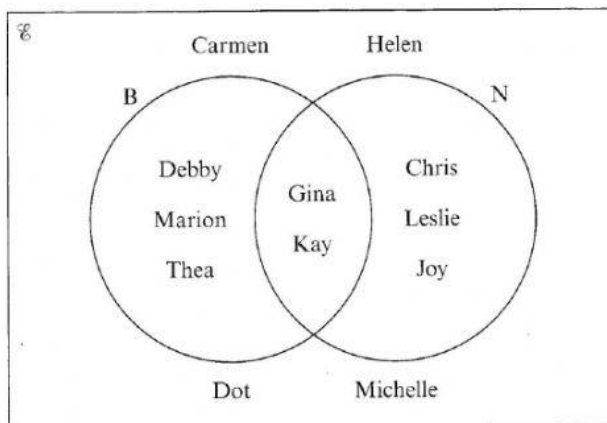
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ROUGH WORK

16. The Venn diagram below shows the results of a class survey.

$B = \{ \text{students who play basketball} \}$

$N = \{ \text{students who wear New shoes} \}$



- (a) How many students play basketball?

Answer: \_\_\_\_\_ [1]

- (b) Which students play basketball and wear new shoes?

Answer: \_\_\_\_\_ [1]

- (c) Write down  $n(B \cap N)$ .

Answer: \_\_\_\_\_ [2]

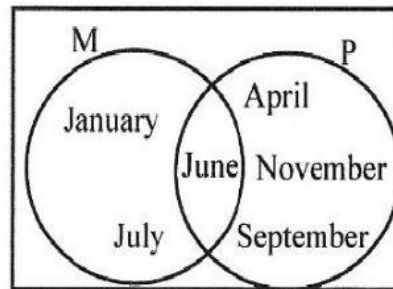
- (d) To which group does Michelle belong?

Answer: \_\_\_\_\_ [2]

- (e) How many students are in the class?

Answer: \_\_\_\_\_ [1]

8. Use the Venn diagram below to answer the following questions.



- (a) List the members of M.

Answer: { \_\_\_\_\_  
\_\_\_\_\_ } [1]

- (b) Describe the members of M.

Answer: { \_\_\_\_\_  
\_\_\_\_\_ } [2]

- (c) List the members of

- (i)  $M \cup P$ ,

Answer: { \_\_\_\_\_  
\_\_\_\_\_ } [2]

- (ii)  $M \cap P$ .

Answer: { \_\_\_\_\_ } [1]

- (d) State the number in  $n(P)$ .

Answer: \_\_\_\_\_ [1]