

Chapter 1 Class 11 - Sets - MCQ Worksheet 2 by teachoo

Chapter: [Chapter 1 Class 11 Maths – Sets](#)

Name: _____

School: _____

Roll Number: _____

1. Two students are asked to list the unique subjects they are studying. Student A's list is {Physics, Chemistry, Math}. Student B's list is {Math, Physics, Chemistry}. How do their sets of subjects, A and B , relate?

- (a) They are equal ($A = B$).
- (b) A is a proper subset of B .
- (c) B is a proper subset of A .
- (d) They are disjoint.

2. Let C be the set of all courses offered by a university. Let M be the set of all mathematics courses offered by the same university. Which of the following is true?

- (a) $C = M$

(b) $C \subset M$

(c) $M \subset C$

(d) $C \cap M = \phi$

3. A building's access log tracks employees. Let M be the set of employees who entered before 9 AM, and E be the set of employees who left after 5 PM. The expression $(M \cup E)'$ represents the set of employees who:

(a) Entered before 9 AM and left after 5 PM.

(b) Entered before 9 AM or left after 5 PM.

(c) Entered at or after 9 AM AND left at or before 5 PM.

(d) Did not come to the office at all.

4. A project's main folder on a computer is 'ProjectX' (Set P). Inside, there is a file 'report.docx' and a sub-folder 'Images', which contains 'logo.png'. So, $P = \{ \text{'report.docx'}, \{ \text{'logo.png'} \} \}$. Which statement is true?

(a) The file 'logo.png' is an element of P .

(b) The folder 'Images' is an element of P .

(c) The folder 'Images' is a subset of P .

(d) Set P has three elements.

5. A universal set U is all the medicines in a pharmacy. A is the set of medicines that treat headaches, and B is the set of medicines that treat fever. If $A - B = \phi$, what must be true?

(a) No headache medicine treats fever.

- (b) Any medicine that treats a headache also treats a fever.
- (c) The pharmacy has no headache medicines.
- (d) The pharmacy has no fever medicines.

6. Which of the following real-world collections describes a finite set?

- (a) All the possible temperatures between 20°C and 21°C .
- (b) The set of all atoms in the planet Earth.
- (c) The set of all multiples of 5 .
- (d) All the points on the circumference of a circle.

7. If A is the set of all squares and B is the set of all rectangles, then $A \cap B$ is the set of:

- (a) All squares.
- (b) All rectangles.
- (c) All parallelograms.
- (d) An empty set.

8. In a clinical trial, U is the set of all participants. Let P be the set of participants who received the placebo. What does the set $P \cup P'$ represent?

- (a) Only the participants who received the actual drug.
- (b) Only the participants who received the placebo.
- (c) All participants in the trial.

(d) No one, it's an empty set.

9. A video editing software has two export settings: '4K Resolution' (Set A) and 'High Frame Rate' (Set B). A specific codec is in the set $B - A$. How would you describe this codec's capability?

(a) It supports both settings.

(b) It supports 4 K Resolution, but not High Frame Rate.

(c) It supports High Frame Rate, but not 4K Resolution.

(d) It supports neither setting.

10. A bank's security protocol has two stages. Stage A requires a 4-digit PIN where the sum of digits is prime. Stage B requires the PIN to be an odd number. Which of the following PINs passes Stage A but fails Stage B?

(a) 1234 (Sum = 10)

(b) 1110 (Sum=3)

(c) 2351 (Sum=11)

(d) 1111 (Sum=4)

Important links

- Answer of this worksheet - <https://www.teachoo.com/25605/5368/MCQ---Worksheet-2/category/Teachoo-Questions---MCQs/>

- Full Chapter with Explanation, Activity, Worksheets and more –
<https://www.teachoo.com/subjects/cbse-maths/class-11th/ch1-11th-sets/>
- Maths Class 11 - <https://www.teachoo.com/subjects/cbse-maths/class-11th/>

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