

Quiz 2

Question 1 (4 pts)

Given the three sets $A = \{a, b, c\}$, $B = \{b, c, d\}$, $C = \{b, d, e\}$. Find the correct matching for each of the set.

$A \cup (B - C)$ [Choose]

$(A - B) \cap C$ [Choose]

$(A \cup C) - B$ [Choose]

$B \cap (C - A)$ [Choose]

Question 2 (2 pts)

How many element does the power set of $\{-1, 3, 5, 6\}$ have?

☐ 15

☐ 8

☐ 12

☐ 16

Question 3 (4 pts)

Let A, B, C be three sets. Which of the following statements is always correct:

(i) $A \cup B$ is a subset of $A \cup (B \cap C)$

(ii) $(A \cup B) \cap C$ is a subset of $A \cup (B \cap C)$

(iii) $A - C$ is a subset of $(A \cup C) - B$

(iv) $(A - B) \cup (C - B)$ is a subset of $(A \cup C) - B$

☐ (i), (ii) and (iii)

☐ (ii) and (iv)

☐ (i) and (iv)

☐ (ii) and (iii)

☐ None of the above