

1.) Let $A = \{1, 2, 3, 4, 5\}$, $B = \{0, 1, 4, 8\}$, and $C = \{2, 5, 7, 9, 11, 13, 17\}$.

Compute each of the following.

(a) $A \cup B$.

(b) $A \cap B$.

(c) $A \cap C$.

(d) $A - B$.

(e) $A - (B \cup C)$.

(f) $(A - B) \cup (A - C)$.

2. Let A , B , and C be the sets given in the previous exercise and let the universal set $U = \{0, 1, 2, 3, 4, \dots, 20\}$. Compute the following.

(a) \overline{A}

(b) \overline{B}

(c) $\overline{A \cap B}$

(d) $\overline{A \cup B}$