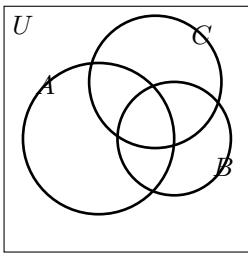


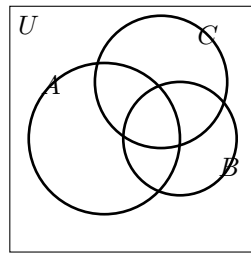
# 反射テスト 集合 論理記号とベン図 01

1. 次の論理式が表す部分に斜線を引け。(S級1分20秒, A級2分, B級2分40秒, C級3分30秒)

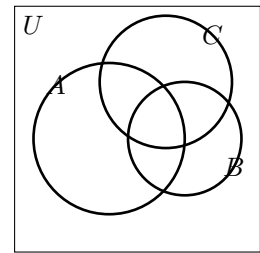
(1)  $\bar{A}$



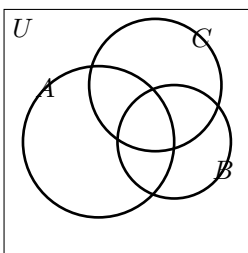
(2)  $A \cap B$



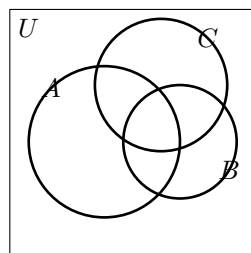
(3)  $B \cup C$



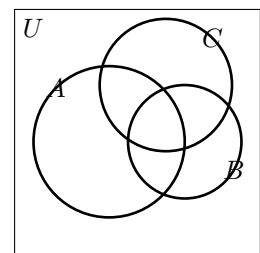
(4)  $A \cap \bar{C}$



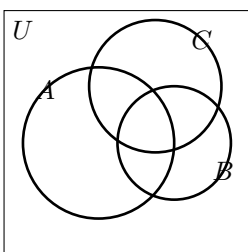
(5)  $\bar{B} \cup C$



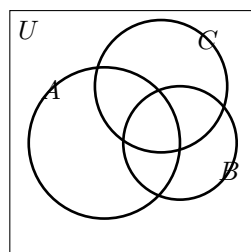
(6)  $A \cap B \cap C$



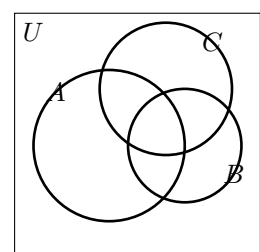
(7)  $(A \cap B) \cup (A \cap C)$



(8)  $\bar{A} \cap \bar{B} \cap \bar{C}$

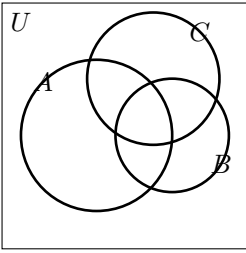


(9)  $A \cup (\overline{B \cup C})$

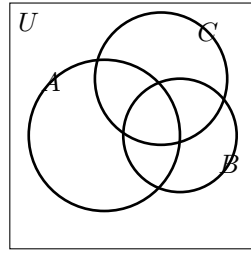


2. 次の論理式が表す部分に斜線を引け。(S級1分20秒, A級2分, B級2分40秒, C級3分30秒)

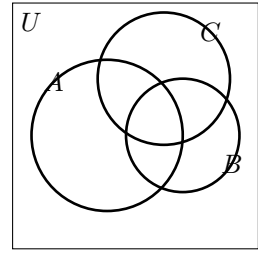
(1)  $\bar{B}$



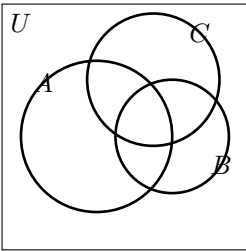
(2)  $C \cap A$



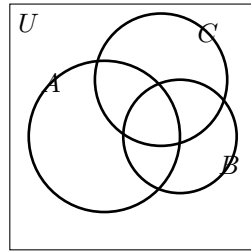
(3)  $A \cup B$



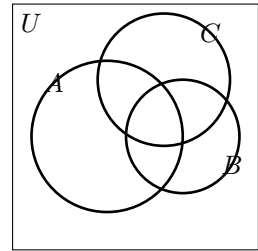
(4)  $\bar{A} \cap B$



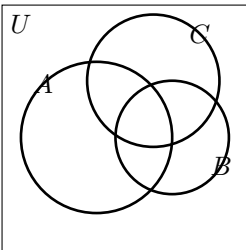
(5)  $\bar{B} \cup \bar{C}$



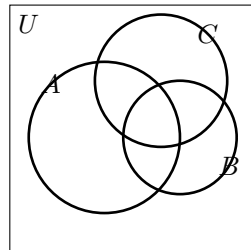
(6)  $A \cup B \cup C$



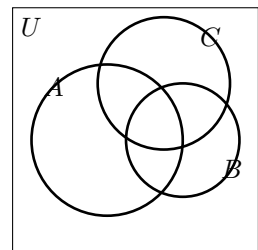
(7)  $(A \cup B) \cap (A \cup C)$



(8)  $\bar{A} \cup \bar{B} \cup \bar{C}$



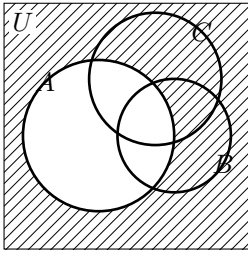
(9)  $A \cap (\overline{B \cap C})$



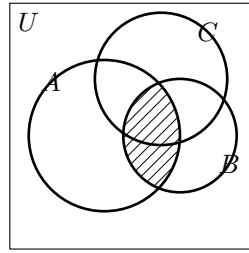
# 反射テスト 集合 論理記号とベン図 01 解答解説

1. 次の論理式が表す部分に斜線を引け。(S級1分20秒, A級2分, B級2分40秒, C級3分30秒)

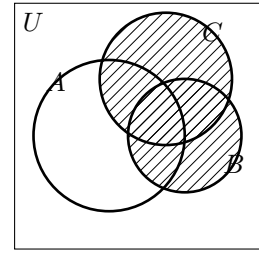
(1)  $\bar{A}$



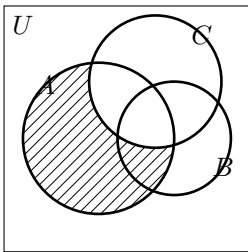
(2)  $A \cap B$



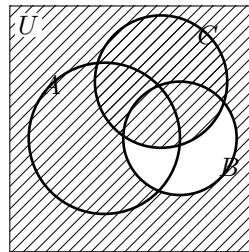
(3)  $B \cup C$



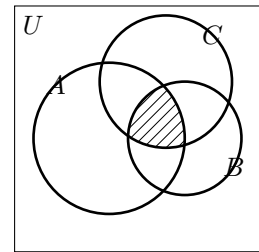
(4)  $A \cap \bar{C}$



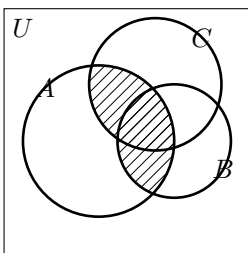
(5)  $\bar{B} \cup C$



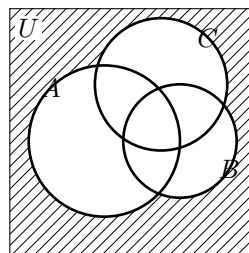
(6)  $A \cap B \cap C$



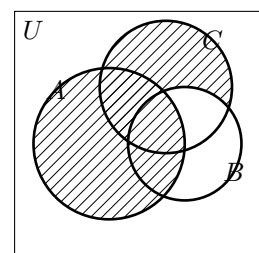
(7)  $(A \cap B) \cup (A \cap C)$



(8)  $\bar{A} \cap \bar{B} \cap \bar{C}$



(9)  $A \cup (\bar{B} \cap \bar{C})$



$$(A \cap B) \cup (A \cap C)$$

$$\Leftrightarrow A \cap (B \cup C)$$

★ 結合法則

$$\bar{A} \cap \bar{B} \cap \bar{C}$$

$$\Leftrightarrow \overline{A \cup B \cup C}$$

∴ ★ ド・モルガンの法則

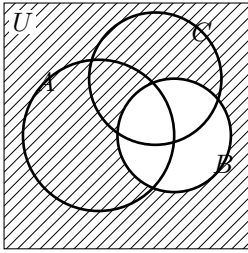
$$A \cup (\bar{B} \cap \bar{C})$$

$$\Leftrightarrow A \cup \overline{(B \cap C)}$$

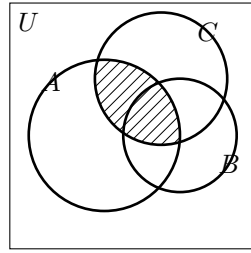
∴ ★ ド・モルガンの法則

2. 次の論理式が表す部分に斜線を引け。(S級1分20秒, A級2分, B級2分40秒, C級3分30秒)

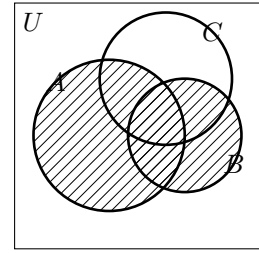
(1)  $\bar{B}$



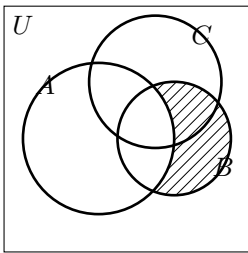
(2)  $C \cap A$



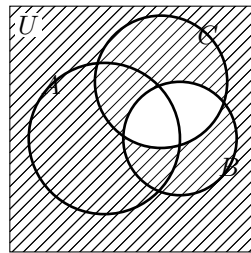
(3)  $A \cup B$



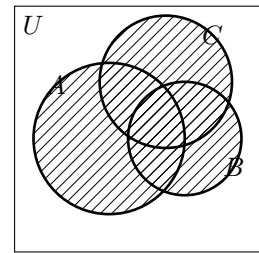
(4)  $\bar{A} \cap B$



(5)  $\overline{B \cup C}$

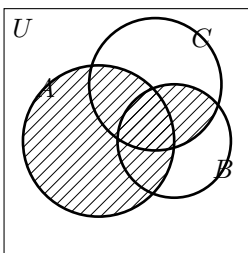


(6)  $A \cup B \cup C$

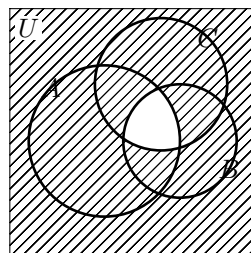


$$\begin{aligned} & \overline{B \cup C} \\ \Leftrightarrow & \overline{B \cap C} \\ \therefore & \star \text{ド・モルガンの法則} \end{aligned}$$

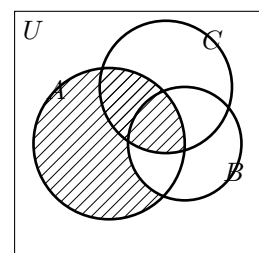
(7)  $(A \cup B) \cap (A \cup C)$



(8)  $\overline{A \cup B \cup C}$



(9)  $A \cap (\overline{B \cap C})$



$$\begin{aligned} & (A \cup B) \cap (A \cup C) \\ \Leftrightarrow & A \cup (B \cap C) \\ \star & \text{結合法則} \end{aligned}$$

$$\begin{aligned} & \overline{A \cup B \cup C} \\ \Leftrightarrow & \overline{A \cap B \cap C} \\ \therefore & \star \text{ド・モルガンの法則} \end{aligned}$$

$$\begin{aligned} & A \cap (\overline{B \cap C}) \\ \Leftrightarrow & A \cap (\overline{B} \cup \overline{C}) \\ \therefore & \star \text{ド・モルガンの法則} \end{aligned}$$