Set01 Answers for No.9790

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{1, 5, 11\} \\ area2 = \{7\} \\ area3 = \{2, 3, 6, 10\} \\ area4 = \{4, 8, 9\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 8 \\ n(A - B) = 3 & n(U - (A \cup B)) = 3 \\ n(B - A) = 4 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{10, 14\} \\ area2 = \{2, 7\} \\ area3 = \{4\} \\ area4 = \{3, 5, 6, 8, 9, 11, 12, 13\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 5 \\ n(A - B) = 2 & n(U - (A \cup B)) = 8 \\ n(B - A) = 1 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{\ \} \\ area2 = \{8, 12\} \\ area3 = \{\ \} \\ area4 = \{0\} \\ area5 = \{\ \} \\ area6 = \{4, 5, 9\} \\ area7 = \{1, 10\} \\ area8 = \{2, 3, 6, 7, 11, 13\} \end{bmatrix}, .2 = \begin{bmatrix} n(\mathrm{intersect}(A, B, C)) = 0 & n(A - B) = 1 \\ n(\mathrm{union}(A, B, C)) = 8 & n(B - A) = 3 \\ n(A \cap B) = 2 & n(C \cap (A \cup B)) = 4 \\ n(B \cap C) = 3 & n(C \cup (A \cap B)) = 8 \\ n(A \cup C) = 8 & n(\mathrm{intersect}(A, B, C)') = 14 \\ n(B \cup C) = 8 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{2, 3, 6, 7, 8, 9, 11, 12, 13\} \\ A \cap B = \{2, 8, 11\} \\ A \cup B' = \{2, 3, 4, 5, 6, 8, 10, 11\} \\ B \cap A' = \{7, 9, 12, 13\} \\ A - B = \{3, 6\} \\ B' - A = \{4, 5, 10\} \\ (A \cup B)' = \{4, 5, 10\} \\ A' \cap B' = \{4, 5, 10\} \\ (A - B)' = \{2, 4, 5, 7, 8, 9, 10, 11, 12, 13\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cup B = \{area1, area2, area3\}) \\ .2 = (B' - A' = \{area1\}) \\ .3 = ((A \cap B)' = \{area1, area3, area4\}) \\ .4 = (A \cap B = \{area2, area5\}) \\ .5 = (C \cap (A \cup B) = \{area4, area5, area6\}) \\ .6 = ((A \cap C) \cup (B \cap C) = \{area4, area5, area6\}) \\ .7 = ((B - A) \cap (B - C) = \{area3\}) \\ .8 = (A' \cap B' = \{area7, area8\}) \\ .9 = ((A - C)' - B = \{area4, area7, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.9888

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{3, 10, 11\} \\ area2 = \{9\} \\ area3 = \{2, 6, 7, 12\} \\ area4 = \{4, 5, 8, 13\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 8 \\ n(A - B) = 3 & n(U - (A \cup B)) = 4 \\ n(B - A) = 4 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{4, 8, 14, 16\} \\ area2 = \{3, 11\} \\ area3 = \{6, 9, 12\} \\ area4 = \{5, 7, 10, 13, 15, 17\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 9 \\ n(A - B) = 4 & n(U - (A \cup B)) = 6 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{7\} \\ area2 = \{\ \} \\ area3 = \{3, 9\} \\ area4 = \{4, 16\} \\ area5 = \{17\} \\ area6 = \{\ \} \\ area7 = \{1, 5, 11, 14\} \\ area8 = \{2, 6, 8, 10, 12, 13, 15\} \end{bmatrix}, .2 = \begin{bmatrix} n(\text{intersect}(A, B, C)) = 1 & n(A - B) = 3 \\ n(\text{union}(A, B, C)) = 10 & n(B - A) = 2 \\ n(A \cap B) = 1 & n(C \cap (A \cup B)) = 3 \\ n(B \cap C) = 1 & n(C \cup (A \cap B)) = 7 \\ n(A \cup C) = 8 & n(\text{intersect}(A, B, C)') = 16 \\ n(B \cup C) = 9 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{1, 2, 3, 5, 7, 8, 9, 10, 11, 13, 14\} \\ A \cap B = \{11, 13\} \\ A \cup B' = \{1, 3, 4, 6, 7, 8, 11, 12, 13\} \\ B \cap A' = \{2, 5, 9, 10, 14\} \\ A - B = \{1, 3, 7, 8\} \\ B' - A = \{4, 6, 12\} \\ (A \cup B)' = \{4, 6, 12\} \\ A' \cap B' = \{4, 6, 12\} \\ (A - B)' = \{2, 4, 5, 6, 9, 10, 11, 12, 13, 14\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cup B = \{area1, area2, area3\}) \\ .2 = (A - B = \{area1\}) \\ .3 = ((A \cap B)' = \{area1, area3, area4\}) \\ .4 = (A \cap B = \{area2, area5\}) \\ .5 = (A \cap (B \cup C) = \{area2, area4, area5\}) \\ .6 = ((A \cap B) \cup (A \cap C) = \{area2, area4, area5\}) \\ .7 = ((B - A) \cap (B - C) = \{area3\}) \\ .8 = (B' - A' = \{area1, area4\}) \\ .9 = (B \cap (C - A)' = \{area2, area3, area5\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.9926

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{0, 6, 9\} \\ area2 = \{5\} \\ area3 = \{2, 10\} \\ area4 = \{1, 3, 4, 7, 8, 11, 12\} \end{bmatrix}, .2 = \begin{bmatrix} \mathrm{n}(A \cap B) = 1 & \mathrm{n}(A \cup B) = 6 \\ \mathrm{n}(A - B) = 3 & \mathrm{n}(U - (A \cup B)) = 7 \\ \mathrm{n}(B - A) = 2 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{1, 5, 8, 9\} \\ area2 = \{0, 3, 10\} \\ area3 = \{\ \} \\ area4 = \{2, 4, 6, 7\} \end{bmatrix}, .2 = \begin{bmatrix} \mathrm{n}(A \cap B) = 3 & \mathrm{n}(A \cup B) = 7 \\ \mathrm{n}(A - B) = 4 & \mathrm{n}(U - (A \cup B)) = 4 \\ \mathrm{n}(B - A) = 0 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{2, 4, 13, 14\} \\ area2 = \{\ \} \\ area3 = \{1, 12\} \\ area4 = \{\ \} \\ area5 = \{\ \} \\ area6 = \{6, 8, 16\} \\ area7 = \{10, 11, 15\} \\ area8 = \{3, 5, 7, 9\} \end{bmatrix}, .2 = \begin{bmatrix} \mathrm{n}(\mathrm{intersect}(A, B, C)) = 0 & \mathrm{n}(A - B) = 4 \\ \mathrm{n}(\mathrm{union}(A, B, C)) = 12 & \mathrm{n}(B - A) = 5 \\ \mathrm{n}(A \cap B) = 0 & \mathrm{n}(C \cap (A \cup B)) = 3 \\ \mathrm{n}(B \cap C) = 3 & \mathrm{n}(C \cup (A \cap B)) = 6 \\ \mathrm{n}(A \cup C) = 10 & \mathrm{n}(\mathrm{intersect}(A, B, C)') = 16 \\ \mathrm{n}(B \cup C) = 8 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{1, 3, 5, 8, 9, 10, 12\} \\ A \cap B = \{10, 12\} \\ A \cup B' = \{2, 3, 4, 5, 6, 7, 9, 10, 11, 12\} \\ B \cap A' = \{1, 8\} \\ A - B = \{3, 5, 9\} \\ B' - A = \{2, 4, 6, 7, 11\} \\ (A \cup B)' = \{2, 4, 6, 7, 11\} \\ A' \cap B' = \{2, 4, 6, 7, 11\} \\ (A - B)' = \{1, 2, 4, 6, 7, 8, 10, 11, 12\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cup B = \{area1, area2, area3\}) \\ .2 = (B - A = \{area3\}) \\ .3 = ((A - B) \cap (B - A) = \{\ \}) \\ .4 = (A \cup C = \{area1, area2, area4, area5, area6, area7\}) \\ .5 = (A \cup (B \cap C) = \{area1, area2, area4, area5, area6\}) \\ .6 = ((A \cup B) \cap (A \cup C) = \{area1, area2, area4, area5, area6\}) \\ .7 = ((A - B) \cup (A - C) = \{area1, area2, area4\}) \\ .8 = (B' \cup C' = \{area1, area2, area3, area4, area7, area8\}) \\ .9 = (C' \cap (B - A)' = \{area1, area2, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.9929

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{12, 13\} \\ area2 = \{5, 11\} \\ area3 = \{4, 8, 9, 10\} \\ area4 = \{6, 7, 14\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 8 \\ n(A - B) = 2 & n(U - (A \cup B)) = 3 \\ n(B - A) = 4 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{7, 9, 10, 14, 16\} \\ area2 = \{6\} \\ area3 = \{8, 13, 15\} \\ area4 = \{3, 4, 5, 11, 12\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 9 \\ n(A - B) = 5 & n(U - (A \cup B)) = 5 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{1, 3, 9\} \\ area2 = \{13, 15\} \\ area3 = \{8, 12\} \\ area4 = \{5, 7\} \\ area5 = \{\ \} \\ area6 = \{6\} \\ area7 = \{\ \} \\ area8 = \{2, 4, 10, 11, 14\} \end{bmatrix}, .2 = \begin{bmatrix} n(\text{intersect}(A, B, C)) = 0 & n(A - B) = 5 \\ n(\text{union}(A, B, C)) = 10 & n(B - A) = 3 \\ n(A \cap B) = 2 & n(C \cap (A \cup B)) = 3 \\ n(B \cap C) = 1 & n(C \cup (A \cap B)) = 5 \\ n(A \cup C) = 8 & n(\text{intersect}(A, B, C)') = 15 \\ n(B \cup C) = 7 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{1, 3, 4, 8, 10, 11, 14, 15\} \\ A \cap B = \{15\} \\ A \cup B' = \{1, 2, 4, 5, 6, 7, 9, 11, 12, 13, 15\} \\ B \cap A' = \{3, 8, 10, 14\} \\ A - B = \{1, 4, 11\} \\ B' - A = \{2, 5, 6, 7, 9, 12, 13\} \\ (A \cup B)' = \{2, 5, 6, 7, 9, 12, 13\} \\ A' \cap B' = \{2, 5, 6, 7, 9, 12, 13\} \\ (A - B)' = \{2, 3, 5, 6, 7, 8, 9, 10, 12, 13, 14, 15\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (B' = \{area1, area4\}) \\ .2 = (A' - B' = \{area3\}) \\ .3 = ((A \cap B)' = \{area1, area3, area4\}) \\ .4 = (A \cup B = \{area1, area2, area3, area4, area5, area6\}) \\ .5 = (A \cap (B \cup C) = \{area2, area4, area5\}) \\ .6 = ((A \cap B) \cup (A \cap C) = \{area2, area4, area5\}) \\ .7 = ((A - B) \cup (A - C) = \{area1, area2, area4\}) \\ .8 = (A' \cap C' = \{area3, area8\}) \\ .9 = (A' \cap (B - C)' = \{area6, area7, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.10106

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{3, 5, 6, 7\} \\ area2 = \{\ \} \\ area3 = \{4, 12, 15\} \\ area4 = \{8, 9, 10, 11, 13, 14\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 0 & n(A \cup B) = 7 \\ n(A - B) = 4 & n(U - (A \cup B)) = 6 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{11, 13\} \\ area2 = \{6, 7, 12\} \\ area3 = \{2, 4, 8\} \\ area4 = \{0, 1, 3, 5, 9, 10\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 3 & n(A \cup B) = 8 \\ n(A - B) = 2 & n(U - (A \cup B)) = 6 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{0\} \\ area2 = \{2, 4, 8, 10\} \\ area3 = \{\ \} \\ area4 = \{7\} \\ area5 = \{14\} \\ area6 = \{\ \} \\ area7 = \{5, 6\} \\ area8 = \{1, 3, 9, 11, 12, 13\} \end{bmatrix}, .2 = \begin{bmatrix} n(\text{intersect}(A, B, C)) = 1 & n(A - B) = 2 \\ n(\text{union}(A, B, C)) = 9 & n(B - A) = 0 \\ n(A \cap B) = 5 & n(C \cap (A \cup B)) = 2 \\ n(B \cap C) = 1 & n(C \cup (A \cap B)) = 8 \\ n(A \cup C) = 9 & n(\text{intersect}(A, B, C)') = 14 \\ n(B \cup C) = 8 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{0, 1, 4, 5, 7, 8, 9, 12, 13, 14\} \\ A \cap B = \{4, 7\} \\ A \cup B' = \{2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14\} \\ B \cap A' = \{0, 1, 13\} \\ A - B = \{5, 8, 9, 12, 14\} \\ B' - A = \{2, 3, 6, 10, 11\} \\ (A \cup B)' = \{2, 3, 6, 10, 11\} \\ A' \cap B' = \{2, 3, 6, 10, 11\} \\ (A - B)' = \{0, 1, 2, 3, 4, 6, 7, 10, 11, 13\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cup B = \{area1, area2, area3\}) \\ .2 = (B - A' = \{area2\}) \\ .3 = ((A - B) \cap (B - A) = \{\ \}) \\ .4 = (A \cup B = \{area1, area2, area3, area4, area5, area6\}) \\ .5 = (A \cap (B \cup C) = \{area2, area4, area5\}) \\ .6 = ((A \cap B) \cup (A \cap C) = \{area2, area4, area5\}) \\ .7 = ((C - A) \cup (C - B) = \{area4, area6, area7\}) \\ .8 = (C' - A' = \{area1, area2\}) \\ .9 = ((B - C)' - A = \{area6, area7, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.10139

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{7, 12\} \\ area2 = \{4, 8, 10\} \\ area3 = \{5, 6, 11\} \\ area4 = \{2, 3, 9\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 3 & n(A \cup B) = 8 \\ n(A - B) = 2 & n(U - (A \cup B)) = 3 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{14, 15, 17\} \\ area2 = \{10, 13\} \\ area3 = \{4, 5, 7, 8, 16\} \\ area4 = \{3, 6, 9, 11, 12\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 10 \\ n(A - B) = 3 & n(U - (A \cup B)) = 5 \\ n(B - A) = 5 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{2, 9\} \\ area2 = \{\ \} \\ area3 = \{5, 6\} \\ area4 = \{4, 10\} \\ area5 = \{14\} \\ area6 = \{\ \} \\ area7 = \{1, 3, 11, 12\} \\ area8 = \{7, 8, 13, 15\} \end{bmatrix}, .2 = \begin{bmatrix} n(\mathrm{intersect}(A, B, C)) = 1 & n(A - B) = 4 \\ n(\mathrm{union}(A, B, C)) = 11 & n(B - A) = 2 \\ n(A \cap B) = 1 & n(C \cap (A \cup B)) = 3 \\ n(B \cap C) = 1 & n(C \cup (A \cap B)) = 7 \\ n(A \cup C) = 9 & n(\mathrm{intersect}(A, B, C)') = 14 \\ n(B \cup C) = 9 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{4, 5, 6, 8, 10, 12\} \\ A \cap B = \{5, 6, 12\} \\ A \cup B' = \{2, 3, 5, 6, 7, 9, 11, 12\} \\ B \cap A' = \{4, 8, 10\} \\ A - B = \{\ \} \\ B' - A = \{2, 3, 7, 9, 11\} \\ (A \cup B)' = \{2, 3, 7, 9, 11\} \\ A' \cap B' = \{2, 3, 7, 9, 11\} \\ (A - B)' = \{2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (B' = \{area1, area4\}) \\ .2 = (A - B' = \{area2\}) \\ .3 = (A' \cap B' = \{area4\}) \\ .4 = (B \cap C = \{area5, area6\}) \\ .5 = (C \cap (A \cup B) = \{area4, area5, area6\}) \\ .6 = ((A \cap C) \cup (B \cap C) = \{area4, area5, area6\}) \\ .7 = ((C - A) \cup (C - B) = \{area4, area6, area7\}) \\ .8 = (B' - C' = \{area4, area7\}) \\ .9 = ((B - A)' - C = \{area1, area2, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.10226

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{\ \} \\ area2 = \{5, 8, 12\} \\ area3 = \{7, 9, 11\} \\ area4 = \{2, 3, 4, 6, 10\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 3 & n(A \cup B) = 6 \\ n(A - B) = 0 & n(U - (A \cup B)) = 5 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{4, 6, 9, 11, 14\} \\ area2 = \{15, 18\} \\ area3 = \{7, 10, 16\} \\ area4 = \{5, 8, 12, 13, 17\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 10 \\ n(A - B) = 5 & n(U - (A \cup B)) = 5 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{11, 12\} \\ area2 = \{\ \} \\ area3 = \{1, 4, 6, 14\} \\ area4 = \{2, 9\} \\ area5 = \{\ \} \\ area6 = \{7\} \\ area7 = \{0, 8, 15\} \\ area8 = \{3, 5, 10, 13\} \end{bmatrix}, .2 = \begin{bmatrix} n(\mathrm{intersect}(A, B, C)) = 0 & n(A - B) = 4 \\ n(\mathrm{union}(A, B, C)) = 12 & n(B - A) = 5 \\ n(A \cap B) = 0 & n(C \cap (A \cup B)) = 3 \\ n(B \cap C) = 1 & n(C \cup (A \cap B)) = 6 \\ n(A \cup C) = 8 & n(\mathrm{intersect}(A, B, C)') = 16 \\ n(B \cup C) = 10 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{6, 7, 8, 9, 12, 13, 14\} \\ A \cap B = \{9, 12, 13\} \\ A \cup B' = \{4, 5, 6, 8, 9, 10, 11, 12, 13, 14, 15\} \\ B \cap A' = \{7\} \\ A - B = \{6, 8, 14\} \\ B' - A = \{4, 5, 10, 11, 15\} \\ (A \cup B)' = \{4, 5, 10, 11, 15\} \\ A' \cap B' = \{4, 5, 10, 11, 15\} \\ (A - B)' = \{4, 5, 7, 9, 10, 11, 12, 13, 15\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cup B = \{area1, area2, area3\}) \\ .2 = (B' - A' = \{area1\}) \\ .3 = (A' \cup B' = \{area1, area3, area4\}) \\ .4 = (A' = \{area3, area6, area7, area8\}) \\ .5 = (A \cup (B \cap C) = \{area1, area2, area4, area5, area6\}) \\ .6 = ((A \cup B) \cap (A \cup C) = \{area1, area2, area4, area5, area6\}) \\ .7 = ((C - A) \cup (C - B) = \{area4, area6, area7\}) \\ .8 = (B' \cup C' = \{area1, area2, area3, area4, area7, area8\}) \\ .9 = ((C - A)' - B = \{area1, area4, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.10356

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{4, 9, 11\} \\ area2 = \{6\} \\ area3 = \{5, 10, 12, 13, 14\} \\ area4 = \{7, 8, 15\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 9 \\ n(A - B) = 3 & n(U - (A \cup B)) = 3 \\ n(B - A) = 5 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{5, 12, 13, 14, 16\} \\ area2 = \{3, 9\} \\ area3 = \{4, 6, 8\} \\ area4 = \{7, 10, 11, 15\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 10 \\ n(A - B) = 5 & n(U - (A \cup B)) = 4 \\ n(B - A) = 3 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{14\} \\ area2 = \{8\} \\ area3 = \{11, 13, 15, 16\} \\ area4 = \{17\} \\ area5 = \{\ \} \\ area6 = \{\ \} \\ area7 = \{3, 18, 19\} \\ area8 = \{4, 5, 6, 7, 9, 10, 12, 20\} \end{bmatrix}, .2 = \begin{bmatrix} n(\text{intersect}(A, B, C)) = 0 & n(A - B) = 2 \\ n(\text{union}(A, B, C)) = 10 & n(B - A) = 4 \\ n(A \cap B) = 1 & n(C \cap (A \cup B)) = 1 \\ n(B \cap C) = 0 & n(C \cup (A \cap B)) = 5 \\ n(A \cup C) = 6 & n(\text{intersect}(A, B, C)') = 18 \\ n(B \cup C) = 9 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{3, 5, 6, 7, 8, 10, 11, 12, 13\} \\ A \cap B = \{6, 12\} \\ A \cup B' = \{4, 5, 6, 7, 8, 9, 12\} \\ B \cap A' = \{3, 10, 11, 13\} \\ A - B = \{5, 7, 8\} \\ B' - A = \{4, 9\} \\ (A \cup B)' = \{4, 9\} \\ A' \cap B' = \{4, 9\} \\ (A - B)' = \{3, 4, 6, 9, 10, 11, 12, 13\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A' = \{area3, area4\}) \\ .2 = (B' - A = \{area4\}) \\ .3 = (A' \cup B' = \{area1, area3, area4\}) \\ .4 = (B' = \{area1, area4, area7, area8\}) \\ .5 = (B \cap (A \cup C) = \{area2, area5, area6\}) \\ .6 = ((A \cap B) \cup (B \cap C) = \{area2, area5, area6\}) \\ .7 = ((B - A) \cap (B - C) = \{area3\}) \\ .8 = (A' \cap C' = \{area3, area8\}) \\ .9 = ((A - B)' - C = \{area2, area3, area8\}) \end{bmatrix}$$

Set01 Answers for No.10366

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{1, 3, 5\} \\ area2 = \{2, 9\} \\ area3 = \{6\} \\ area4 = \{0, 4, 7, 8, 10, 11\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 2 & n(A \cup B) = 6 \\ n(A - B) = 3 & n(U - (A \cup B)) = 6 \\ n(B - A) = 1 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{9, 10\} \\ area2 = \{7, 16, 17\} \\ area3 = \{8, 11, 13, 14\} \\ area4 = \{4, 5, 6, 12, 15\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 3 & n(A \cup B) = 9 \\ n(A - B) = 2 & n(U - (A \cup B)) = 5 \\ n(B - A) = 4 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{2, 5, 11, 13\} \\ area2 = \{\ \} \\ area3 = \{12\} \\ area4 = \{8\} \\ area5 = \{4, 14\} \\ area6 = \{1\} \\ area7 = \{7, 10\} \\ area8 = \{3, 6, 9\} \end{bmatrix}, .2 = \begin{bmatrix} n(\mathrm{intersect}(A, B, C)) = 2 & n(A - B) = 5 \\ n(\mathrm{union}(A, B, C)) = 11 & n(B - A) = 2 \\ n(A \cap B) = 2 & n(C \cap (A \cup B)) = 4 \\ n(B \cap C) = 3 & n(C \cup (A \cap B)) = 6 \\ n(A \cup C) = 10 & n(\mathrm{intersect}(A, B, C)') = 12 \\ n(B \cup C) = 7 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{3, 4, 6, 9, 12\} \\ A \cap B = \{3, 6\} \\ A \cup B' = \{2, 3, 5, 6, 7, 8, 10, 11, 12, 13\} \\ B \cap A' = \{4, 9\} \\ A - B = \{12\} \\ B' - A = \{2, 5, 7, 8, 10, 11, 13\} \\ (A \cup B)' = \{2, 5, 7, 8, 10, 11, 13\} \\ A' \cap B' = \{2, 5, 7, 8, 10, 11, 13\} \\ (A - B)' = \{2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cap B = \{area2\}) \\ .2 = (B - A = \{area3\}) \\ .3 = (A' \cap B' = \{area4\}) \\ .4 = (B \cup C = \{area2, area3, area4, area5, area6, area7\}) \\ .5 = (C \cup (A \cap B) = \{area2, area4, area5, area6, area7\}) \\ .6 = ((A \cup C) \cap (B \cup C) = \{area2, area4, area5, area6, area7\}) \\ .7 = ((C - A) \cap (C - B) = \{area7\}) \\ .8 = (B' - A' = \{area1, area4\}) \\ .9 = ((A - B)' - C' = \{area5, area6, area7\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

Set01 Answers for No.10706

$$Ans1 = \left[.1 = \begin{bmatrix} area1 = \{6, 8\} \\ area2 = \{0\} \\ area3 = \{3, 4, 5, 10\} \\ area4 = \{1, 2, 7, 9\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 7 \\ n(A - B) = 2 & n(U - (A \cup B)) = 4 \\ n(B - A) = 4 & Math@MUT \end{bmatrix} \right]$$

$$Ans2 = \left[.1 = \begin{bmatrix} area1 = \{3, 5, 8, 9, 13, 15\} \\ area2 = \{4\} \\ area3 = \{7, 10, 11, 12, 16\} \\ area4 = \{6, 14\} \end{bmatrix}, .2 = \begin{bmatrix} n(A \cap B) = 1 & n(A \cup B) = 12 \\ n(A - B) = 6 & n(U - (A \cup B)) = 2 \\ n(B - A) = 5 & Math@MUT \end{bmatrix} \right]$$

$$Ans3 = \left[.1 = \begin{bmatrix} area1 = \{8\} \\ area2 = \{\ \} \\ area3 = \{2, 6, 15\} \\ area4 = \{\ \} \\ area5 = \{10, 17\} \\ area6 = \{\ \} \\ area7 = \{4, 5, 12, 13\} \\ area8 = \{3, 7, 9, 11, 14, 16, 18, 19\} \end{bmatrix}, .2 = \begin{bmatrix} n(\text{intersect}(A, B, C)) = 2 & n(A - B) = 1 \\ n(\text{union}(A, B, C)) = 10 & n(B - A) = 3 \\ n(A \cap B) = 2 & n(C \cap (A \cup B)) = 2 \\ n(B \cap C) = 2 & n(C \cup (A \cap B)) = 6 \\ n(A \cup C) = 7 & n(\text{intersect}(A, B, C)') = 16 \\ n(B \cup C) = 9 & Math@MUT \end{bmatrix} \right]$$

$$Ans4 = \begin{bmatrix} A \cup B = \{3, 7, 8, 10, 11, 13, 15\} \\ A \cap B = \{\ \} \\ A \cup B' = \{2, 3, 4, 5, 6, 7, 8, 9, 12, 14, 16\} \\ B \cap A' = \{10, 11, 13, 15\} \\ A - B = \{3, 7, 8\} \\ B' - A = \{2, 4, 5, 6, 9, 12, 14, 16\} \\ (A \cup B)' = \{2, 4, 5, 6, 9, 12, 14, 16\} \\ A' \cap B' = \{2, 4, 5, 6, 9, 12, 14, 16\} \\ (A - B)' = \{2, 4, 5, 6, 9, 10, 11, 12, 13, 14, 15, 16\} \end{bmatrix}, \quad Ans5 = \begin{bmatrix} .1 = (A \cap B = \{area2\}) \\ .2 = (A - B' = \{area2\}) \\ .3 = ((A - B) \cap (B - A) = \{\ \}) \\ .4 = (B \cap C = \{area5, area6\}) \\ .5 = (A \cap (B \cup C) = \{area2, area4, area5\}) \\ .6 = ((A \cap B) \cup (A \cap C) = \{area2, area4, area5\}) \\ .7 = ((A - B) \cup (A - C) = \{area1, area2, area4\}) \\ .8 = (C' - A' = \{area1, area2\}) \\ .9 = (B' \cap (A - C)' = \{area4, area7, area8\}) \end{bmatrix}$$

:
:
:
:
:
:
:
:
:
:
:
:
:
:
:

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

X Math@MUT XXXX

xxxx