

Sample Questions: Sets

STA256 Fall 2019. Copyright information is at the end of the last page.

1. Draw a Venn diagram illustrating a distributive law:

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

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

2. Draw a Venn diagram illustrating a distributive law:

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

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

3. Draw a Venn diagram illustrating a De Morgan law:

(a) $(A \cap B)^c$.

(b) $A^c \cup B^c$

4. Draw a Venn diagram illustrating a De Morgan law:

(a) $(A \cup B)^c$.

(b) $A^c \cap B^c$

5. Draw a Venn diagram showing that if A and B are disjoint, then $A \cap C$ and $B \cap C$ are also disjoint.

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<http://www.utstat.toronto.edu/~brunner/oldclass/256f19>