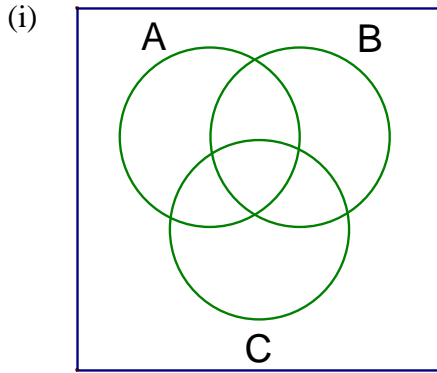


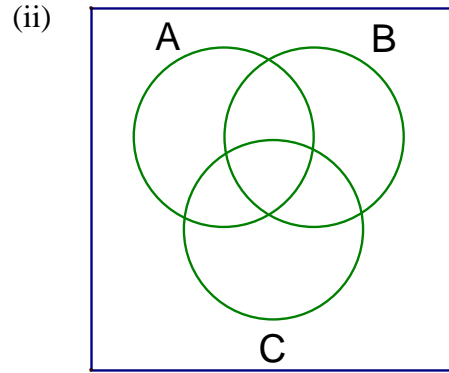
Math 211 Sets Practice Worksheet

1. Shade the region of the Venn diagram indicated by the following sets.

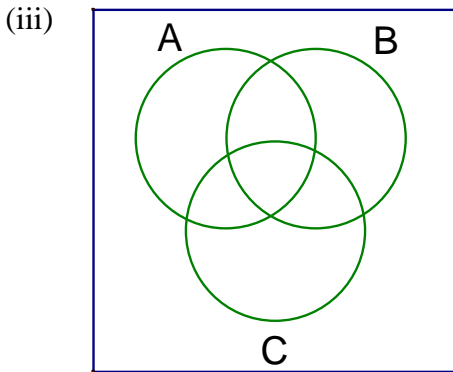


Shade:

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

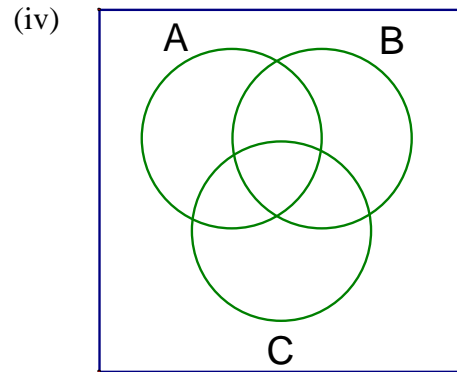


$$(A \cup B)' \cap C$$

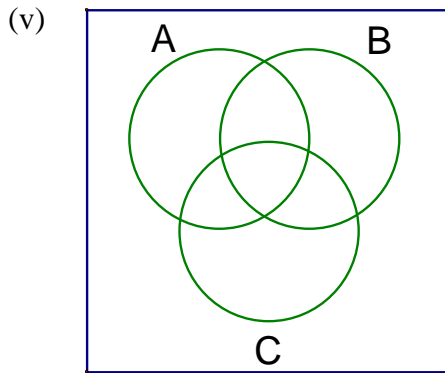


Shade:

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

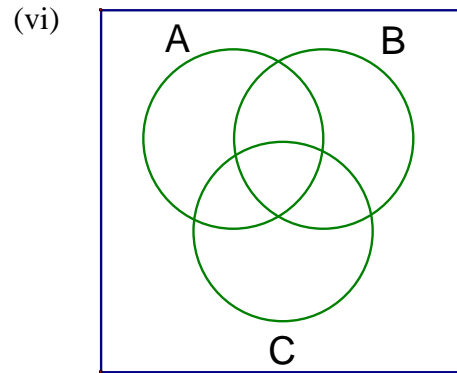


$$(A \cup B') \cup C$$



Shade:

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



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

Math 211 Sets Practice Worksheet

2. List the elements in each of the following sets.

Let $U = \{0,1,2,3,4,5,6,7,8,9,10\}$; $A = \{0,1,2,3,5,8\}$; $B = \{0,2,4,6\}$; $C = \{1,3,5,7\}$

i) $A \cap B =$

ii) $B' =$

iii) $A \cup B' =$

iv) $B \cap C =$

v) $B \cap C' =$

vi) $A' \cap C =$

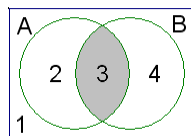
vii) $(A' \cup C) \cap B =$

viii) $(A \cap B)' =$

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

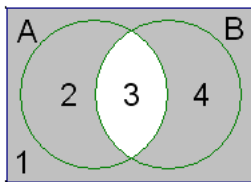
x) Write down a subset of $A =$

3. Refer to the diagram to answer the questions below. What set notation would you use to represent the following regions?

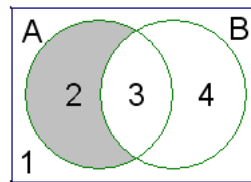


Example: Region 3 could be written as $A \cap B$

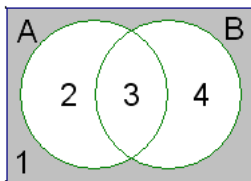
i) Regions 1, 2 and 4 are all shaded



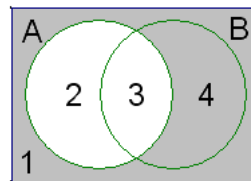
ii) Only Region 2 is shaded.



iii) Only Region 1 is shaded.



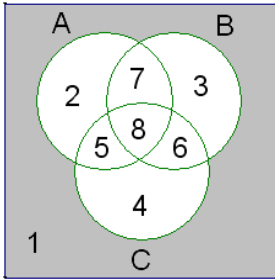
iv) Regions 1 and 4 are shaded.



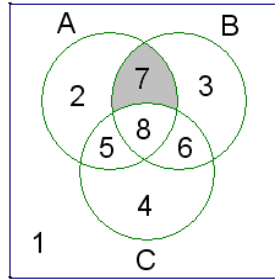
Math 211 Sets Practice Worksheet

4. Refer to the diagram to answer the questions below.

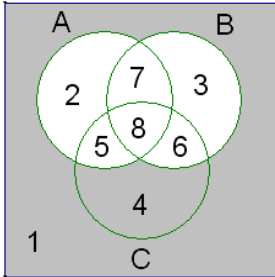
i) Only Region 1 is shaded.



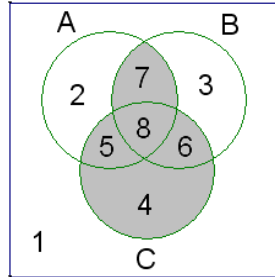
ii) Only Region 7 is shaded.



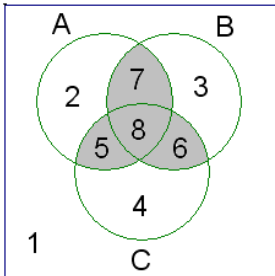
iii) Regions 1 and 4 are shaded.



iv) Regions 4, 5, 6, 7 and 8 are shaded.



v) Regions 5, 6, 7 and 8 are shaded.



vi) Regions 1 and 3 are shaded.

