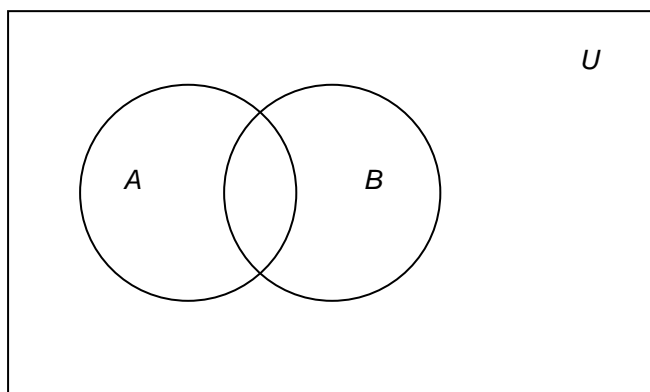


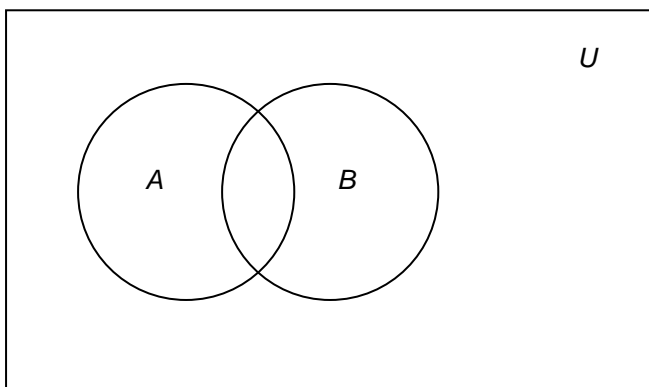
Test Your Understanding: Week 4

1. Using the following diagrams, shade appropriate regions to show the desired sets.

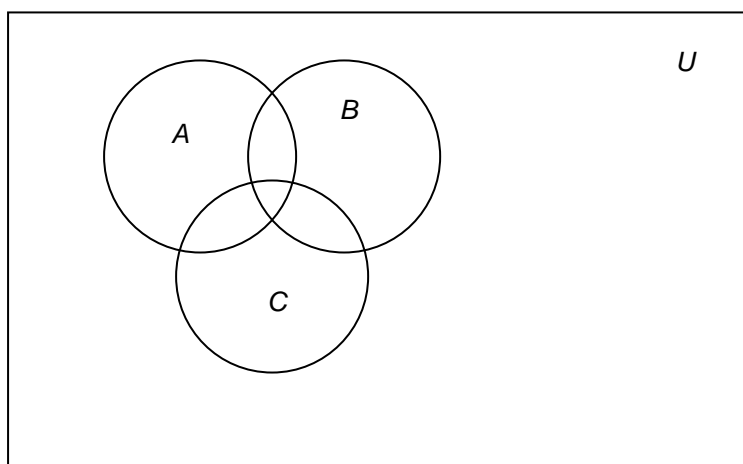
(a) $A \cap B$



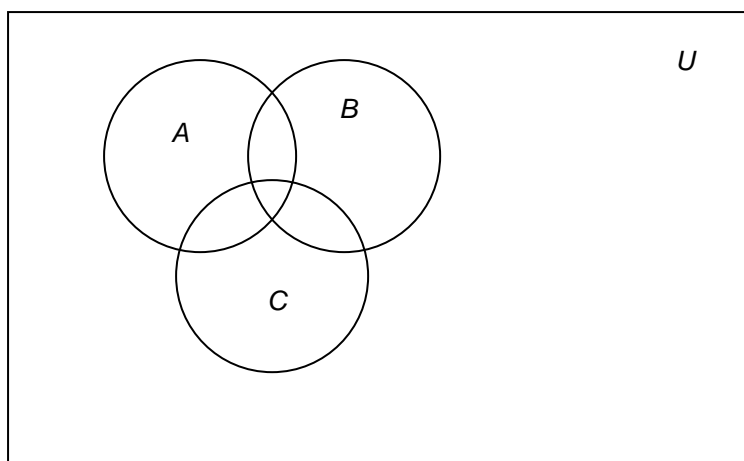
(b) $A - B$



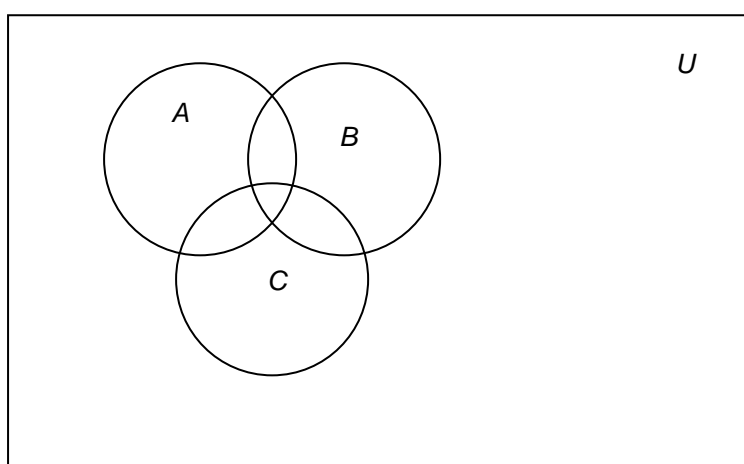
(c) $(A \cup B) \cap C$



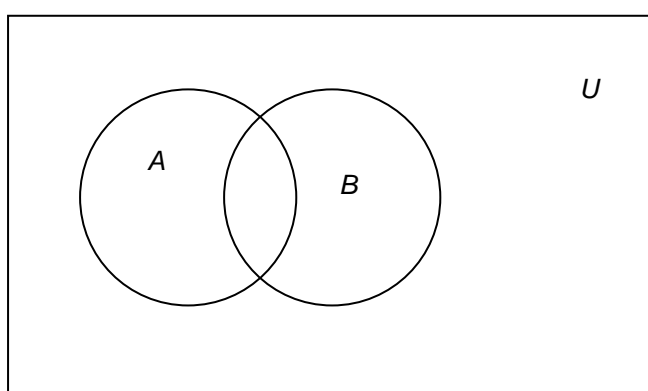
(d) $(A - B) \cup C$



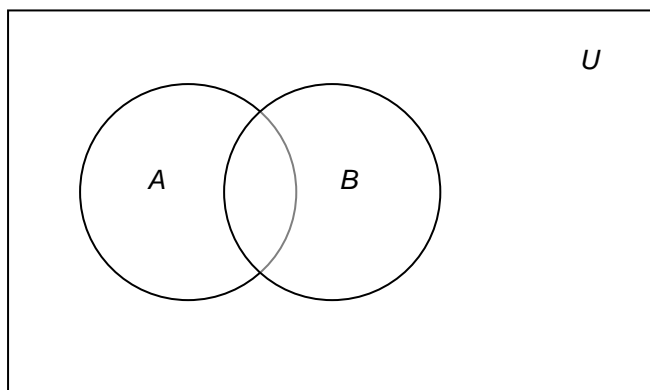
(e) $(A \cap C) - B$



(f) $\overline{A - B}$



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



2. If the universal set $U=\{a,b,c,d,e,f,g,h\}$, $A=\{a,b,c,d\}$ and $B=\{b,d,f,h\}$, then find:

(a) $A \cup B$

(b) \bar{A}

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

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

