1. Create Venn diagrams to illustrate $A \cup B$, $A \cap B$, and $A^C \cap B$
2. Use a Venn diagram to illustrate $(H \cap F)c \cap W$
3. Draw a Venn diagram to represent $H \cap F \cap W^C$
4. A survey asks: Which online services have you used in the last month:
   - Twitter
   - Facebook
   - Have used both

The results show 40% of those surveyed have used Twitter, 70% have used Facebook, and 20% have used both.

   - How many people have used neither Twitter or Facebook?

5. Fifty students were surveyed, and asked if they were taking a social science (SS), humanities (HM) or a natural science (NS) course the next quarter.

21 were taking a SS course
19 were taking a NS course
7 were taking SS and NS,
3 were taking all three
26 were taking a HM course
9 were taking SS and HM
10 were taking HM and NS
7 were taking none

   - How many students are only taking a SS course? Use a Venn diagram also to illustrate your answer.

6. One hundred fifty people were surveyed and asked if they believed in UFOs, ghosts, and Bigfoot.

43 believed in UFOs
25 believed in Bigfoot
8 believed in ghosts and Bigfoot
44 believed in ghosts
10 believed in UFOs and ghosts 5 believed in UFOs and Bigfoot

2 believed in all three

- How many people surveyed believed in at least one of these things?