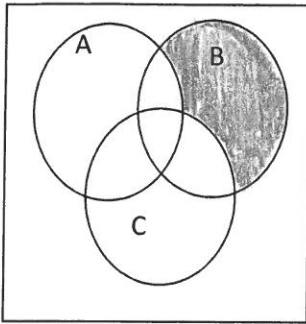
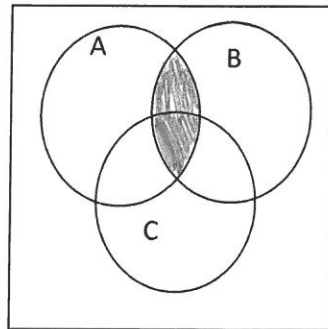


35. Given sets A, B, and C as shown, shade the following:

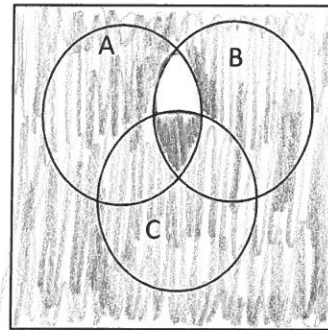
a. $A^c \cap B \cap C^c$



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



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



36. The following data is a comparison of laptops versus desktops purchased from a consumer electronics store in 1 month period.

| | Laptops (L) | Desktops (D) | Totals |
|-------------|-------------|--------------|--------|
| Dell (DL) | 114 | 38 | 152 |
| HP (H) | 72 | 57 | 129 |
| Lenovo (V) | 43 | 41 | 84 |
| Asus (A) | 22 | 13 | 35 |
| Apple (P) | 165 | 101 | 266 |
| Toshiba (T) | 98 | 63 | 161 |
| | 514 | 313 | 827 |

Given the above information, find the following:

a. $L \cap V = \boxed{43}$

b. $(P \cup D \cup L)^c \cap (L \cup D)$

$L \cup D = 514 + 313 = 827$

$827 - (266 + 152) = (P \cup D)^c$
 $= \boxed{409}$

$\therefore 129 + 84 + 35 + 161 = 409$

c. $H^c \cup D$

$H^c \cup D = 827 - 72 = \boxed{755}$