Intersection & Union of Sets Using U Worksheet 2

1) On an average day the local vet handles 3 traumas (T), 7 wellness appointments (W), and 5 medicine requests (M). Set U is the type of daily vet appointments.

a) \( P(T) = \) 

b) \( P(M \cup T)^C = \)

Shade \( P(T) \)

Shade \( P(M \cup T)^C \)

\[ \text{Shade P}(W,M,T)^C \]
\[ \text{Shade P}(W \cup M) \]

c) \( P(W,M,T)^C = \)

d) \( P(W \cup M) = \)

2) 99 people were surveyed for preference of hot tea, hot coffee, or an iced drink. 54 preferred hot coffee (Cf), 21 hot tea (T) and 24 iced drinks (I). Set U is the preferences.

a) \( P(Cf) = \)

b) \( P(Cf \cup T) = \)

Shade \( P(Cf) \)

Shade \( P(Cf \cup T) \)

\[ \text{Shade P}(T \cup I)^C \]
\[ \text{Shade P}(I) \]

c) \( P(T \cup I)^C = \)

d) \( P(I)^C = \)

3) The first 100 ad responders will get a free sapling. There are 30 red maple (M), 50 birch (B), 10 crepe myrtle (C) and 10 oak (O) saplings. Set U is the inventory of saplings.

a) \( P(C \cup O)^C = \)

b) \( P(B \cup O) = \)

Shade \( P(C \cup O)^C \)

Shade \( P(B \cup O) \)

\[ \text{Shade P}(M) \]
\[ \text{Shade P}(M \cup B)^C \]

c) \( P(M) = \)

d) \( P(M \cup B)^C = \)

Shade \( P(M) \)

Shade \( P(M \cup B)^C \)