Intersection & Union of Sets Using U Worksheet 1

1) Steve was cleaning out his workshop and gathered 20 screwdrivers (S), 8 hammers (H), and 12 pliers (L) and organized them into a drawer. Set U is the drawer.

a) \( P(S) = \) \( \square \)  
Shade \( P(S) \)

b) \( P(H)^c = \) \( \square \)  
Shade \( P(H)^c \)

c) \( P(S \cup L) = \) \( \square \)  
Shade \( P(S \cup L) \)

d) \( P(H \cup L) = \) \( \square \)  
Shade \( P(H \cup L) \)

2) In November it snowed (S) 5 days, rained (R) 6, was sunny (Y) 9, and was cloudy (C) 10. Set U is the days in the month of November.

a) \( P(Y)^c = \) \( \square \)  
Shade \( P(Y)^c \)

b) \( P(S \cup R) = \) \( \square \)  
Shade \( P(S \cup R) \)

c) \( P(R) = \) \( \square \)  
Shade \( P(R) \)

d) \( P(S \cup R)^c = \) \( \square \)  
Shade \( P(S \cup R)^c \)

3) There were 13 bicycles (B), 7 recumbent cycles (R), and 4 tricycles (T) on display at a bike store. Set U is the inventory of the bike store.

a) \( P(R \cup T)^c = \) \( \square \)  
Shade \( P(R \cup T)^c \)

b) \( P(B)^c = \) \( \square \)  
Shade \( P(B)^c \)

c) \( P(R) = \) \( \square \)  
Shade \( P(R) \)

d) \( P(B \cup R \cup T) = \) \( \square \)  
Shade \( P(B \cup R \cup T) \)