CSC 2259	John Brasher
Session 5 Worksheet	SI Sessions: Sundays & Mondays @ 6:30 – 8:00 PM [PFT 1212]
02/09/2020	Office Hours: Mondays & Fridays 12:30 – 2:30 PM

1) If S and A are sets where S = {a, b, c, d, e} and A = {c, e}, write out all of the subsets of S which are not subsets of A.

- 2) If S, A, and B are sets where S = {a, b, c, d, e, f, g, h}, A = {a, b, c, d, e}, and B = {d, e, f, g}, find the total #(elements) for each of the following? (Note: \ is meant to be a minus in set notation).
 - a. A\B
 - b. AUB
 - c. $A^{c} \setminus B$
 - $d.\ B^{\textbf{c}}\cap B$

3) A, B, and C are sets where $A = \{a, b, c, h\}$, $B = \{c, d, e, f, h\}$, and $C = \{a, e, f, g, h\}$. Use the following information for your calculations.

|A| = 4, |B| = 5, |C| = 5, $|A \cap B| = 2$, $|A \cap C| = 2$, $|B \cap C| = 3$, $|A \cap B \cap C| = 1$

- a. #(Elements belonging to exactly 2 of these sets)
- b. #(Elements belonging to at least 2 of these sets)
- c. #(Elements belonging to all 3 of these sets)
- d. |A∪B|
- e. |AUBUC|

4) What is DeMorgan's Law?