

Math 313-01, Homework for Quiz # 1

1. Let $S = \{1, 2, 3, f, g, h\}$, $A = \{1, 2, f, g\}$, $B = \{2, 3, g\}$. Find

(i) $A \cup B$, (ii) $A \cap B$, (iii) A^c , (iv) B^c ,

(v) $A^c \cup B^c$, (vi) $A^c \cap B^c$,

(vii) $(A \cup B)^c$, (viii) $(A \cap B)^c$

2. Assume that a six-sided die is rolled twice. Find the probability of the sum being

(i) equal to 9

(ii) greater than or equal to 9

(iii) less than 9