 Let A  and B  be events such that P (A \ B ) = 1/ 4, P (A ˜) = 1/ 3, and P (B ) =

1/ 2. What is P (A [ B ]?

P (A intersect B) = 1/4

P(A) = 1/3

P(B) = 1/2

P ( A union B ) = P(A) + P(B) – P(A int B) = 1/3 + ½ - ¼ = 1/3 + ¼ = 7/12