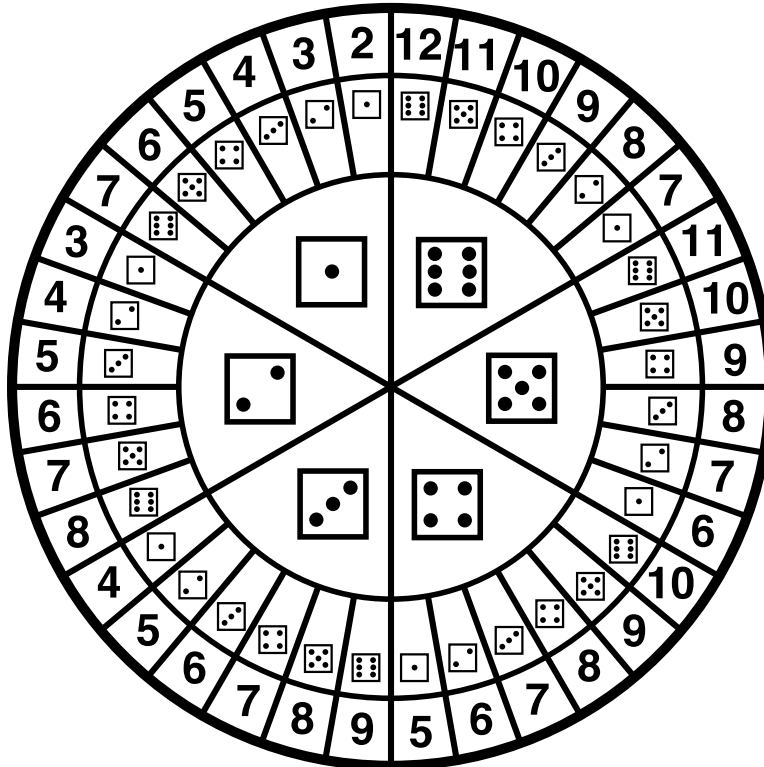


## HOMEWORK ASSIGNMENT # 3

ASSIGNED: OCTOBER 1, 2009 DUE: OCTOBER 8, 2009

Calculate each of the probabilities about the random variable being the roll of a pair of dice. Assume that the two dice are of different colors so we can tell the difference between them.



- (1)  $P(\text{the sum of the dice is } 7)$
- (2)  $P(\text{the sum of the dice is } 5, 6 \text{ or } 7)$
- (3)  $P(\text{the sum of the dice is even})$
- (4)  $P(\text{the sum is greater than } 6 \text{ or the first die is a } 1)$
- (5)  $P(\text{the sum is greater than } 6 \text{ and the first die is a } 3)$
- (6)  $P(\text{the sum is greater than } 6 \text{ and one of the dice is a } 3)$
- (7)  $P(\text{the sum is greater than } 6 \text{ and the first die is a } 1)$
- (8)  $P(\text{the first die is even or the sum of the dice is } 6 \text{ or } 7)$