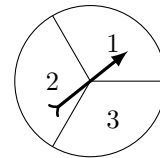


Math 101 - Worksheet for Section 11.1

Name: _____

- Kim's group of preschool children included nine girls and seven boys. If Kim randomly selects one child to be first in line, with E bein the event that the one selected is a girl, give each of the following.
 - The total number of outcomes.
 - The number of favorable outcomes.
 - The number of unfavorable outcomes.
 - The probability of event E .
 - The odds in favor of event E .

- The spinner below is spun twice in succession to determine a two digit number. Give each of the following.
 - The sample space.
 - The probability of an odd number.
 - The probability of a number with repeated digits.
 - The probability of a number greater than 30.
 - The probability of a prime number.



- Three fair coins are tossed. Give each of the following.
 - The sample space.
 - The probability of no heads.
 - The probability of exactly one head.
 - The probability of exactly two heads.
 - The probability of exactly three heads.
 - The probability of at least one heads.
- Ten fair coins are tossed. What is the probability of at least one head?
- If $P(E) = 0.37$, find
 - the odds in favor of E .
 - the odds against E .
 - $P(\text{not } E)$.
- If the odds in favor of E are 12 to 19, find $P(E)$.

7. Two fair dice are tossed. Determine all the possible outcomes for the sum of two numbers on the dice.

+	1	2	3	4	5	6
1						
2						
3						
4						
5						
6						

Find the probability that the **sum** of the two dice is:

- | | | |
|-------|-------|---------|
| (a) 0 | (f) 5 | (k) 10 |
| (b) 1 | (g) 6 | (l) 11 |
| (c) 2 | (h) 7 | (m) 12 |
| (d) 3 | (i) 8 | (n) 13 |
| (e) 4 | (j) 9 | (o) 6,6 |

What is the probability of the sum being an odd number?

What is the probability of the sum being an even number?

8. If a dart hits the square target shown here at random, what is the probability that it will hit it in a shaded region?

