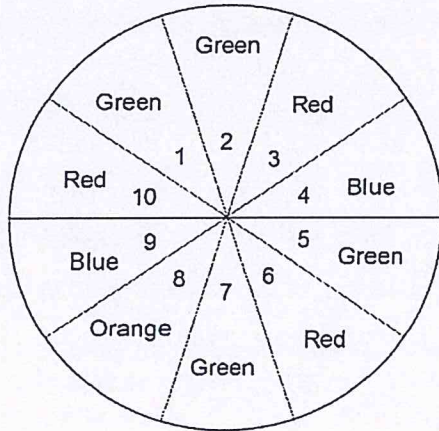


# Bellwork Alg 2 Thursday, May 30, 2019

1. Use the spinner below to find each probability. Give answer as a fraction without reducing.



a)  $P(\text{Green or Odd})$

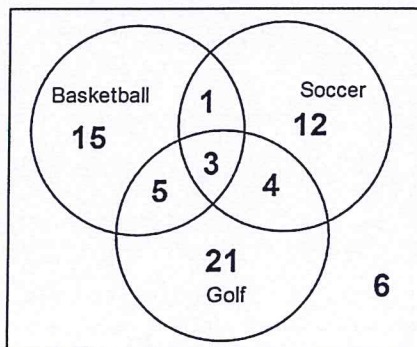
b)  $P(\text{Multiple of 3 and Red})$

c)  $P(\text{Factor of 24 or Blue})$

d)  $P(\text{Prime and Orange})$

e)  $P(\text{Odd and Red})$

2. Use the information in the Venn Diagram about sports people participate in to answer each probability as a fraction without reducing.



a)  $P(\text{Basketball and Soccer})$

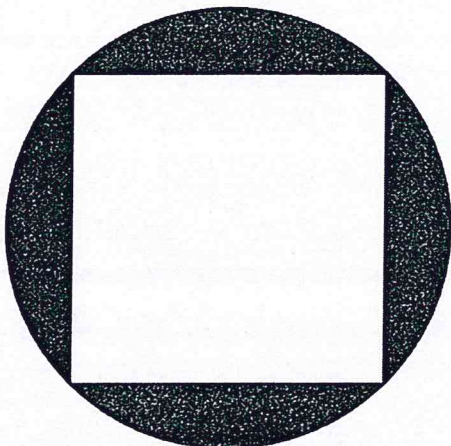
b)  $P(\text{Golf})$

c)  $P(\text{Not Soccer})$

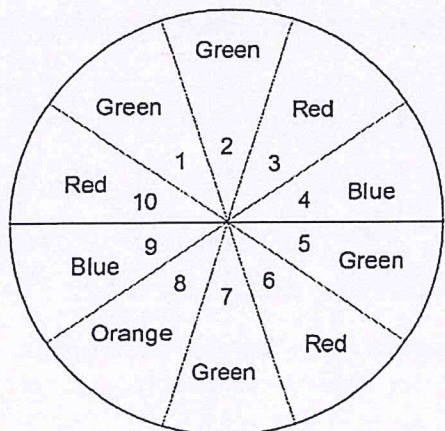
d)  $P(\text{Golf or Soccer})$

e)  $P(\text{Basketball but not Golf})$

3. A square is inscribed in a circle. Find the probability that a randomly chosen point in the circle lies in the shaded region. Give answer as a percent rounded to the nearest hundredth. The area of the square is  $144 \text{ in}^2$ .



1. Use the spinner below to find each probability. Give answer as a fraction without reducing.



a)  $P(\text{Green or Odd})$

$$= \frac{6}{10}$$

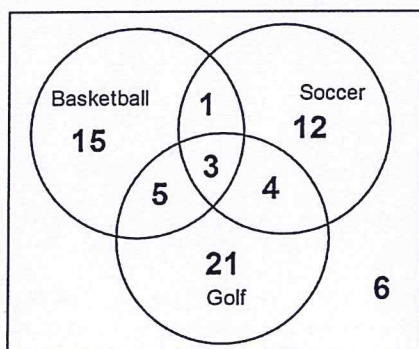
b)  $P(\text{Multiple of 3 and Red}) = \frac{2}{10}$

c)  $P(\text{Factor of 24 or Blue}) = \frac{7}{10}$

d)  $P(\text{Prime and Orange}) = \frac{0}{10}$

e)  $P(\text{Odd and Red}) = \frac{1}{10}$

2. Use the information in the Venn Diagram about sports people participate in to answer each probability as a fraction without reducing.



TOTAL = 67

a)  $P(\text{Basketball and Soccer})$

$$= \frac{4}{67}$$

b)  $P(\text{Golf})$

$$= \frac{33}{67}$$

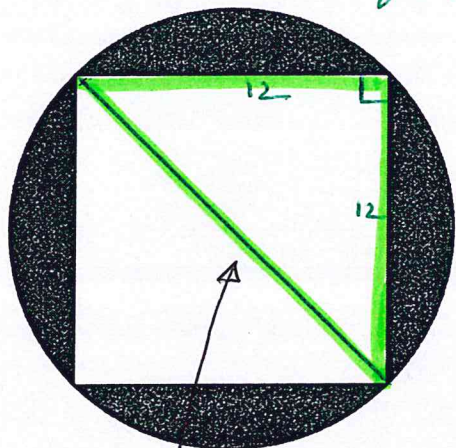
c)  $P(\text{Not Soccer}) = \frac{47}{67}$

d)  $P(\text{Golf or Soccer}) = \frac{46}{67}$

e)  $P(\text{Basketball but not Golf}) = \frac{16}{67}$

3. A square is inscribed in a circle. Find the probability that a randomly chosen point in the circle lies in the shaded region. Give answer as a percent rounded to the nearest hundredth. The area of the square is  $144 \text{ in}^2$ .

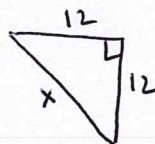
side of the square =  $\sqrt{144} = 12$



hypotenuse of RT Δ and diameter of the circle

$$p = \frac{\text{Area of Circle} - \text{Area of Sq.}}{\text{Area of Circle}}$$

$$= \frac{\pi (6\sqrt{2})^2 - 144}{\pi (6\sqrt{2})^2} = \frac{72\pi - 144}{72\pi} = 36.34\%$$



hypot of  
 $x = 12\sqrt{2} \rightarrow 45^\circ - 45^\circ - 90^\circ$   
 RT Δ  
 $d = 12\sqrt{2} \rightarrow r = 6\sqrt{2}$