May 22, 2012

Get out your homework



5/22 - Indepedent Events

Finding the probability of 2 things happening together that are not connected to each other.



What is the probability of rolling a 5 on the purple die and a 2 on the green one?

		19.00			
1,1	2,1	3,1	4,1	5,1	6,1
1,2	2,2	3,2	4,2	5,2	6,2
1,3	2,3	3,3	4,3	5,3	6,3
1,4	2,4	3,4	4,4	5,4	6,4
1,5	2,5	3,5	4,5	5,5	6,5
1,6	2,6	3,6	4,6	5,6	6,6

1,1	2,1	3,1	4,1	5,1	6,1
1,2	2.2	3,2	4,2	5,2	6,2
1,3	2,3	3.3	4,3	5,3	6,3
1,4	2,4	3,4	4,4	5,4	6,4
1,5	2,5	3,5	4,5	5,5	6,5
1,6	2,6	3,6	4,6	5,6	6,6

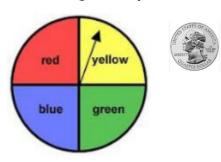
Sample space for rolling two dice.

Find each of these probabilities:

$$P(2,4) = \frac{1}{6} \cdot \frac{1}{6} = \frac{1}{36}$$

P(doubles)=
$$\frac{1}{36}$$
 = $\frac{1}{6}$

Find the given probabilities using the spinner and the coin.



P(red, heads)=

$$\frac{1}{4} \cdot \frac{1}{2} = \frac{1}{8}$$

P(yellow, tails)=

P(not green, heads)=

P(blue or yellow, tails)=

If each letter of the words BUTLER MIDDLE are printed on cards and shuffled, one card is drawn, returned and another is drawn. Find the given probabilities.

$$P(M, T) = \frac{1}{12} \cdot \frac{1}{2} = \frac{1}{444}$$

$$P(\text{vowel, not vowel}) = \frac{1}{3} \cdot \frac{2}{3} = \frac{2}{7}$$

P(letter in first word, letter in second word) =

Homework

Blue Probability WS2

Due Today!