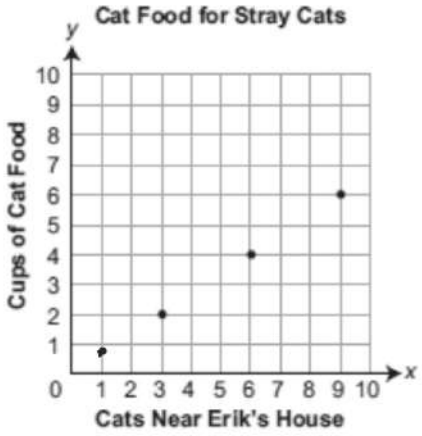
DMR: Friday, March 4, 2016

1. Write your homework in your planner.
2. Fill in your table of contents.
3. Complete LEAP practice PG 11 #11

11. Erik feeds stray cats near his house. The graph below shows different amounts of cat food he puts out based on the number of cats near his house.



unit rate
(1, y)

$\frac{y}{x} = \frac{2}{3}$

Erik graphs point P to represent the unit rate in terms of cups of cat food per cat near his house. What are the coordinates of point P?

$\frac{2}{3}$ c per 1

Ⓐ (0, 0)

● $(1, \frac{2}{3})$

Ⓒ (1, 1)

Ⓓ $(\frac{3}{2}, 1)$

#11

Thursday, March 3, 2016

7. A set of cards is labeled with the numbers 1-5 and a spinner has three colors equally spaced: red, purple, and green. Create the sample space and show all work on the back of this page.

15 possible outcomes

card	spin	SS
1	r	1r
1	p	1p
1	g	1g
2	r	2r
2	p	2p
2	g	2g
3	r	3r
3	p	3p
3	g	3g
4	r	4r
4	p	4p
4	g	4g
5	r	5r
5	p	5p
5	g	5g

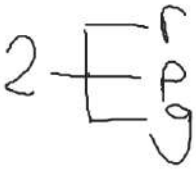
8. Use problem # 7 to find the probability of picking a six and spinning purple.

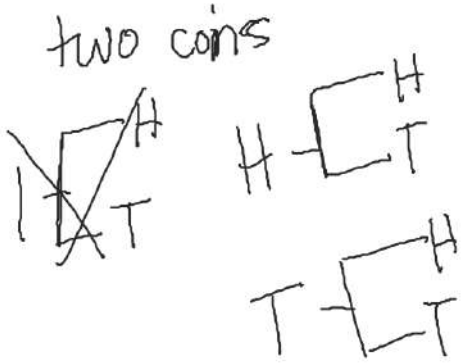
$p(6,\text{purple}) = \frac{0}{15}$

9. Are the events of selecting a number divisible by 2 and selecting a number divisible by 3 equally likely if you have the numbers 1-10 on note cards in a bag? Explain your answer.

1,2,3,4,5,6,7,8,9,10 $\frac{5}{10}$ $\frac{3}{10}$

No, because the possible outcomes will allow a better chance to select a number divisible by 2, in comparison to 3.





OUTCOMES:

- I can find theoretical probability of simple and compound events.
- I can create a sample space.
- I can ensure that all are engaged in today's lesson by...

Theoretical vs. Experimental Page 28

* **Theoretical Probability:**

what should happen

↳based on facts

* **Experimental Probability:**

what does happen

↳based on experiment

1. Consider a chance experiment of rolling a number cube. one cube (simple event) Page 28

a. What is the sample space? List the probability of each outcome in the sample space.

1 4
2 5
3 6

$P(1) = \frac{1}{6}$ $P(3) = \frac{1}{6}$ *theoretical*

$P(2) = \frac{1}{6}$

b. What is the probability of rolling an odd number?

$P(odd) = \frac{3}{6}$ OR $\frac{1}{2}$ OR 0.5 OR 50%

c. What is the probability of rolling a number less than 5?

$P(<5) = \frac{4}{6}$ OR $\frac{2}{3} = 0.\overline{6} = 66.\overline{6}\%$

Trey picked from the letters & here are the results

2. CONSIDER AN EXPERIMENT OF RANDOMLY SELECTING A LETTER FROM THE WORD: NUMBERS

n = 6 r = 1
u = 2 m = 1

a. WHAT IS THE SAMPLE SPACE? LIST THE PROBABILITY OF EACH OUTCOME IN THE SAMPLE SPACE.

n, u, m, b, e, r.

experimental prob. of picking n:

$\frac{6}{10} = \frac{3}{5}$

B. WHAT IS THE PROBABILITY OF SELECTING A VOWEL?

$P(\text{vowel}) = \frac{2}{6} = \frac{1}{3}$

theoretical prob. of picking n?

$\frac{1}{6}$

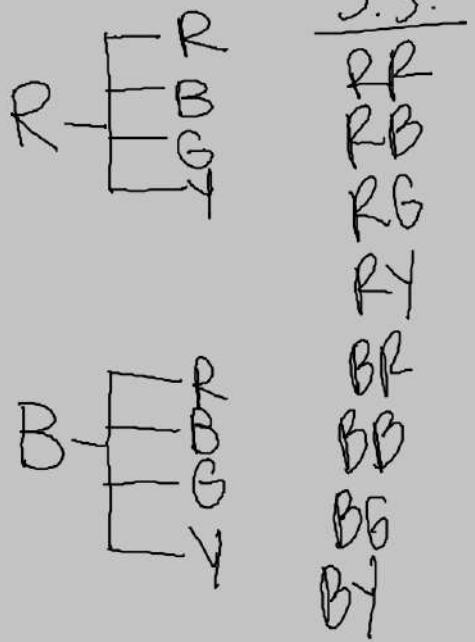
C. WHAT IS THE PROBABILTIY OF SELECTING THE LETTER Z?

$P(z) = \frac{0}{6} = 0$

4. Students are playing a game that requires spinning the two spinners shown below. A student wins the game if both spins land on Red. What is the probability of winning the game? Remember to first list the sample space and the probability of each outcome in the sample space. There are eight possible outcomes to this chance experiment.

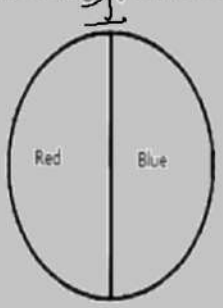
compound

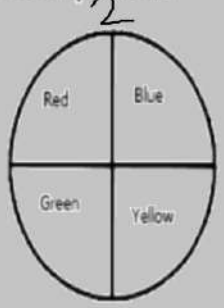
win



S.S.

RR
RB
RG
RY
BR
BB
BG
BY





$P(\text{win}) = \frac{1}{8}$ (RR)

Example 2

S.34-35

Luis works in an office, and the phone rings occasionally. The possible numbers of phone calls he receives in an afternoon and their probabilities are given in the table below.

Number of Phone Calls	0	1	2	3	4
Probability	$\frac{1}{6}$	$\frac{1}{6}$	$\frac{2}{9}$	$\frac{1}{3}$	$\frac{1}{9}$

a. Find the probability that Luis receives 3 or 4 phone calls.

$P(3 \text{ OR } 4) = \frac{1}{3} \cdot \frac{3}{3} + \frac{1}{9}$ $\quad \frac{3}{9} + \frac{1}{9} = \boxed{\frac{4}{9}}$

b. Find the probability that Luis receives fewer than 2 phone calls.

$P(<2) = \frac{1}{6} + \frac{1}{6} = \boxed{\frac{2}{6} \text{ OR } \frac{1}{3}}$

c. Find the probability that Luis receives 2 or fewer phone calls.

$P(\leq 2) = \frac{1}{6} \cdot \frac{3}{3} + \frac{1}{6} \cdot \frac{3}{3} + \frac{2}{9} \cdot \frac{2}{2}$ $\quad \frac{3}{18} + \frac{3}{18} + \frac{4}{18} = \boxed{\frac{10}{18} \text{ OR } \frac{5}{9}}$

d. Find the probability that Luis does not receive 4 phone calls.

TOTD (review)

PRACTICE:

Bag A contains 9 red marbles and 3 green marbles. Bag B contains 9 black marbles and 6 orange marbles. Find the probability of selecting one green marble from bag A and one black marble from bag B.

If you draw two cards from a standard deck of 52 cards without replacement, find:

a. P (King first, Jack second)

_____

b. P (face card first, ace second)

_____

c. P (2 aces)

_____