8/30/2012

Math 304

Turn in Activity 7: Paper-Scissors-Rock

Check Homework for Section 9.1 & vocabulary
Professor Harms will score your Vocabulary Notebook (5 pts. if all terms & properties are defined and examples included for each)

Notes for Section 9.2 -MultiStage Experiments with Tree Diagrams & Geometric Probability

Assignment

Take out your assignment and check it over

Section 9-1

Try This 9-1

520

a) The sum of the probabilities of tossing a coin once using all the distinct outcomes in the sample space is = 1

$P(H)+P(T)=\frac{1}{2}+\frac{1}{2}=1$

b) Sum of the outcomes of tossing a die = 1

$P(1)+P(2)\ldots+P(6)=\left(\frac{1}{6}\right)\cdot 6=1$

c) Yes, the sum is always 1

528

1) a. No
b. Yes
c. Yes
d. No

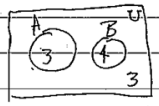
$P(F)=\frac{12}{52}$ $P(\text{not F})=\frac{40}{52}$

$P(K)=\frac{4}{52}$ $P(\text{even})=\frac{20}{52}$

2) a. 5/26
b. 21/26
c. 11/26

5) a. 4/12 or 1/3
b. 8/12 or 2/3
c. 0
d. 6/12 or 1/2
e. 1 (model w/ slips of paper)

12) Given $P(A)=0.3$ & $P(B)=0.4$



$P(A \cup B)=\frac{7}{10}$ or 0.7

17) a. P(vowel) = 4/10 or 2/5
b. P(const) = 6/10 or 3/5

Connections 9-1

1. $P(A) = 0.8$ & $P(B) = 0.9$
These events can not be mutually exclusive as $P(A) + P(B) > 1$

6. (ex probability is used is the chance of getting in an accident give demographics such as age, car type, where you live

14. $P(E) = 3/5$ it may have 3 ways out of 5 but it could have any multiple of those so there may be 6 ways out of 10 or 9 out of 15.

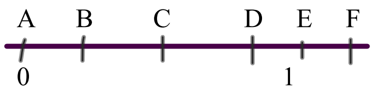
TIMSS

$\frac{x}{30} = \frac{1}{5}$

e) Six students are less than 13 yrs old

boys / total: $\frac{.45}{100} = \frac{x}{1200}$ (×12)

c) 540

7.


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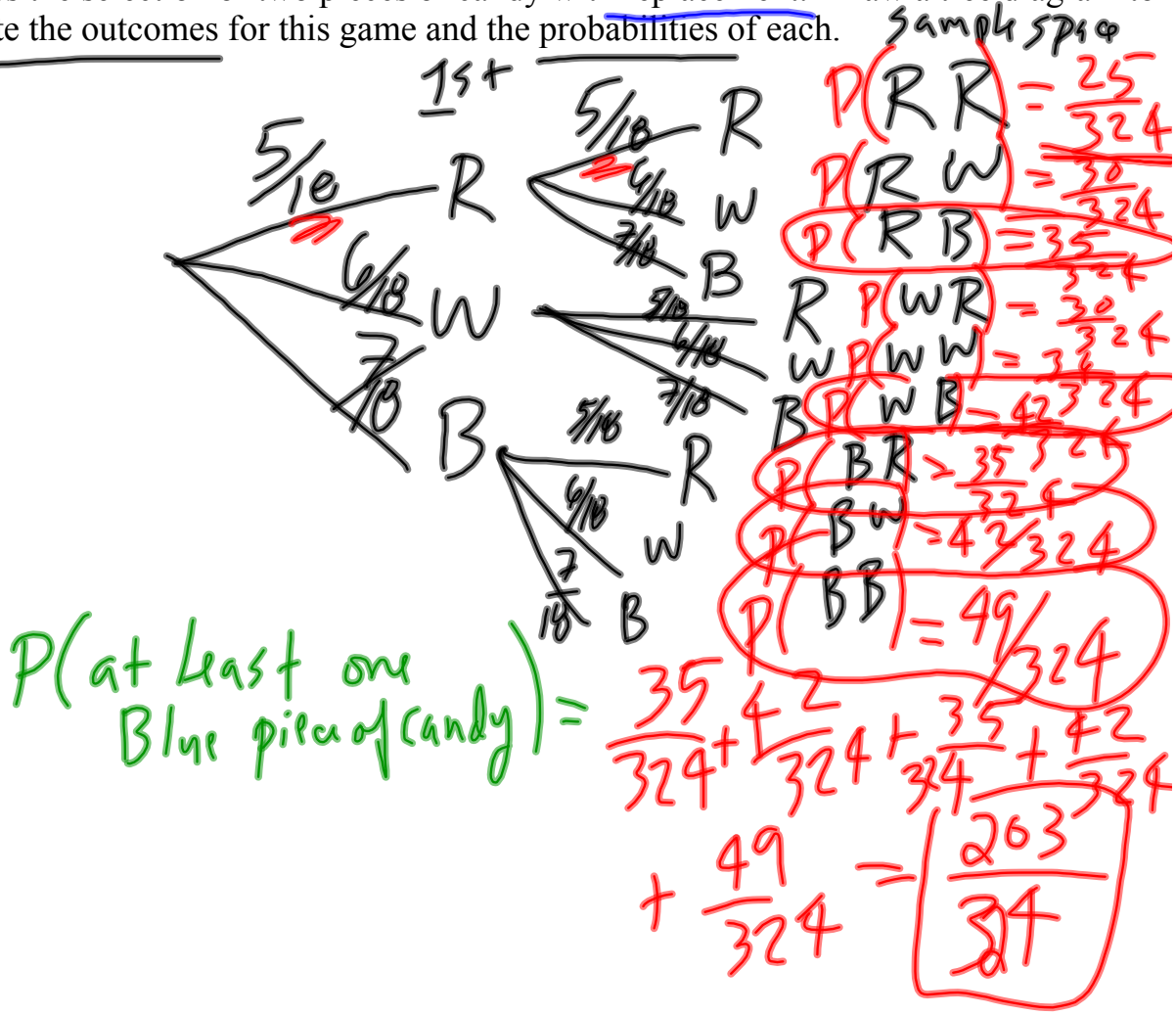
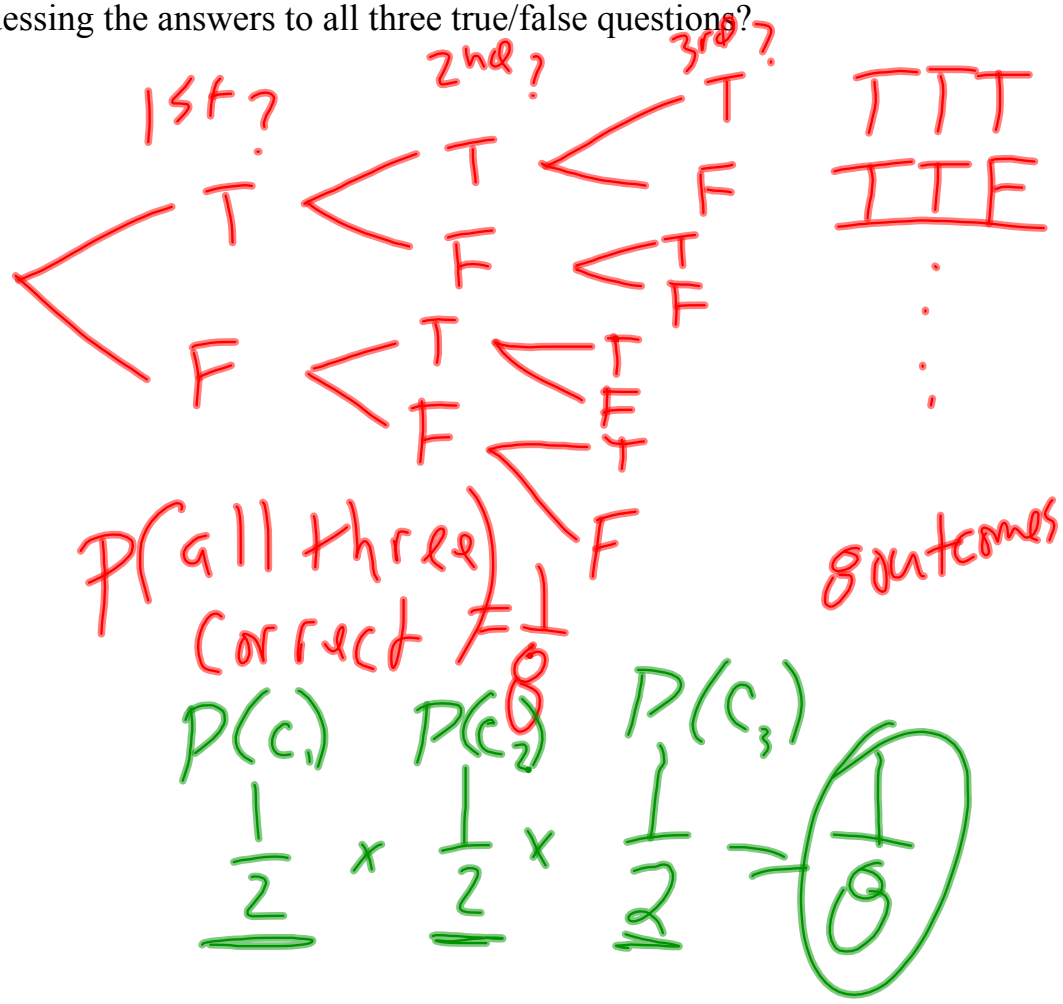
Notes Sect. 9.2 - Multistage Experiments with Tree Diagrams and Geometric Probabilities

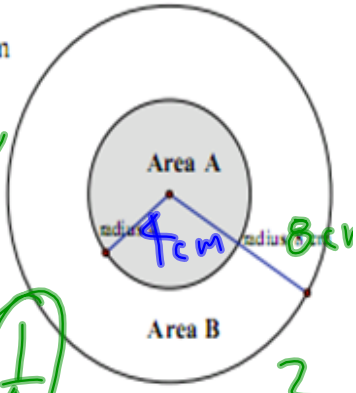
1. A bag of candy that contains five red, six white, and seven blue is used for a game that involves the selection of two pieces of candy with replacement. Draw a tree diagram to generate the outcomes for this game and the probabilities of each.



2. If you have three true or false questions, what is the probability of correctly guessing the answers to all three true/false questions?



3. If a dart is thrown at the following target and we assume the dart lands at random on the board, what is the probability of its landing in each of the following areas?



(a) Area A (gray)

$P(\text{gray}) = \frac{4^2 \cdot \pi}{8^2 \pi} = \frac{1}{4}$

(b) Area B (white)

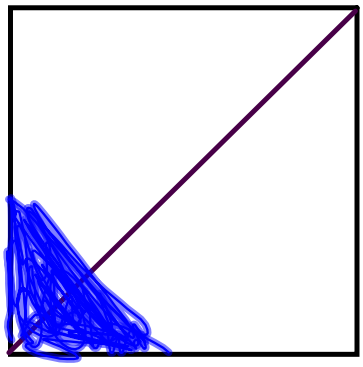
$= 1 - \frac{1}{4} = \frac{3}{4}$

$P(G) = \frac{16}{64} = \frac{1}{4}$

$A_g = \pi r^2$

- Take out the tangram pieces if you have the Lab Packet cut out the 7 pieces on p. 72 if not pick up a plastic set of t
from the box up front.
- Take out the two large triangles and form a square from them then trace this in your notes
- Place a single small triangle in a corner of that outlined square, and trace that then shade that triangle section.

4. What is the probability that of dropping a seed given it lands in the square that it will fall in the shaded region?



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

Assignment Due Tuesday Sept. 4th

Go to http://web.mnstate.edu/harms/

Read pp. 534-548 , complete the Vocabulary in section 9.2

Try This 9-4 on p. 536
9.2A #1, 2, 8, 9, 11, 14, 15, 16 on 549-550
Connections 9-2 # 3, 7, 12 & NAEP Question on pp. 552-554

http://www.mnstate.edu/harms/304/Summer11/Vocabulary/Vocab9-2.htm

http://www.khanacademy.org/video/probability--part-2?playlist=Probability

http://www.youtube.com/user/khanacademy#p/c/0/mLE-SlOZToc