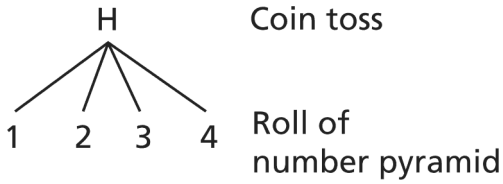
Homework (Online Learning Day 5)

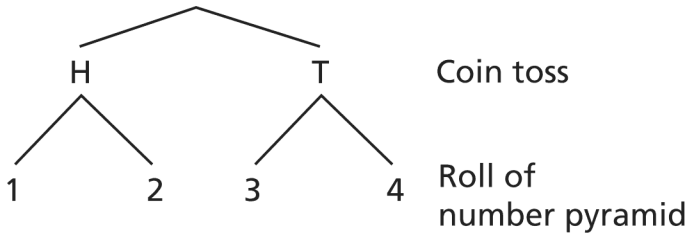
Name: _____ **Date:** _____

1. Which tree diagram shows all of the possible outcomes for tossing a coin and rolling a fair number pyramid that has four sides labeled 1 through 4?

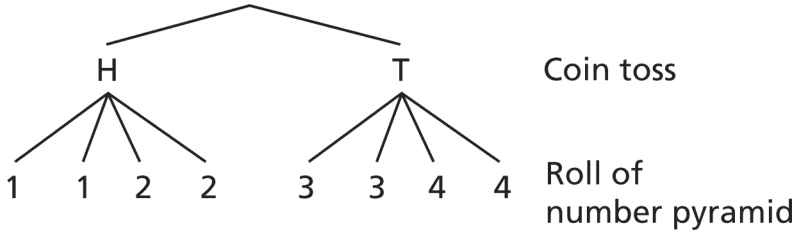
A.



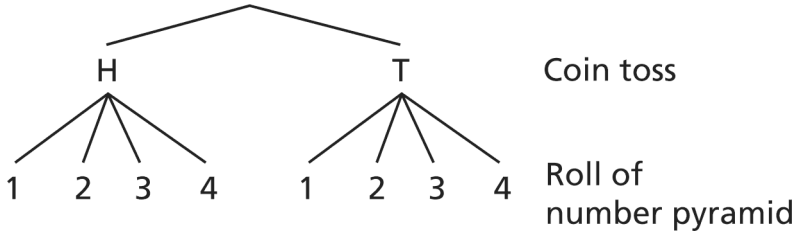
B.



C.



D.



2. To select a new school mascot, 20 randomly selected students in each grade were asked to choose between the two finalists: tiger and eagle. The results are shown below.

PREFERRED MASCOT

Grade	Tiger	Eagle
5	14	6
6	13	7
7	8	12
8	5	15

Which statement is *best* supported by the results?

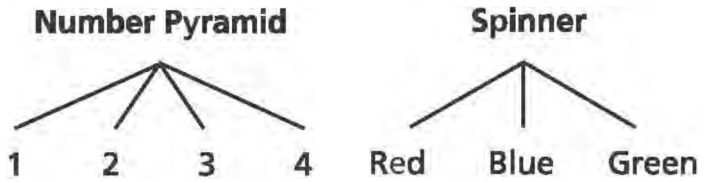
A. The preferred mascot is a tiger.

B. The preferred mascot is an eagle.

C. Fifth and sixth grade students at the school preferred an eagle mascot.

D. Seventh and eighth grade students at the school preferred an eagle mascot.

3. Henry has a fair number pyramid with four faces and a spinner with three equal-sized colored sections. The possible outcomes for each are shown below.



What is the probability that the number pyramid will land on three and the spinner will stop on blue?

A. $\frac{1}{12}$ B. $\frac{3}{12}$ C. $\frac{4}{12}$ D. $\frac{7}{12}$

4. The results for a survey of 120 students who were selected randomly are listed below:

   - 60 students have a cell phone plan with company X
   - 36 students have a cell phone plan with company Y
   - 24 students do not have a cell phone

   The total population of students was 380. Based on the data, what is the *best* approximation for the total number of students who have a cell phone plan with company Y?

   A. 114 B. 127 C. 143 D. 163

5. Two math classes took the same quiz. The scores of 10 randomly selected students from each class are listed below.

   - Sample of Class A: 75, 80, 60, 90, 85, 80, 70, 90, 70, 65
   - Sample of Class B: 95, 90, 85, 90, 100, 75, 90, 85, 90, 85

   Based on the medians of the scores for each class, what inference would you make about the quiz scores of all the students in Class A compared to all the students in Class B? Explain your reasoning to justify your answer.