

## Lesson 14 ~ Use Probability To Predict

Name \_\_\_\_\_ Period \_\_\_\_\_ Date \_\_\_\_\_

1. You plant 20 marigold seeds and 12 of them grow into flowers that bloom. If you plant 10 more marigolds, predict how many would bloom.
  
2. Cameron threw three touchdown passes in one game out of 9 touchdown pass attempts.
  - a. Find the experimental probability Cameron will throw a touchdown pass when attempted.
  
  - b. Cameron has 12 touchdown pass attempts in a game. Predict how many touchdowns he completes.
  
3. Lana surveyed 30 students. She asked for their favorite type of movie. Their responses are below.

Movie Type	Comedy	Drama	Action	Documentary
Number of Students	6	5	15	4

- a. Find the experimental probability a student will pick each of the four types of movies.

Movie Type	Comedy	Drama	Action	Documentary
Experimental Probability				

- b. Use the probability in **part a** to predict how many students out of 60 students would choose drama as their favorite type of movie.
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4. Rangers in central Oregon wanted to estimate the number of elk in a certain area. They tagged 20 elk one Saturday and sent them back to mix with the other elk in the area. The rangers went back once a month for the next three months and recorded the following.

	Month 1	Month 2	Month 3
Tagged elk in sample	4	6	12
Total elk in sample	7	10	18

- a. Estimate the size of the elk population for each month.

Month 1 =

Month 2 =

Month 3 =

- b. Find the average of the three estimates in **part a**.