

Week 1: Math HW
(March 11-15, 2024) Pg 1 of 2

Homework Practice

Make Predictions

QUIZ SHOW For Exercises 1 and 2, use the following information.

On a quiz show, a contestant correctly answered 9 of the last 12 questions.

- Based on these results, find the probability of the contestant correctly answering the next question.
- Suppose the contestant continues on the show and tries to correctly answer 24 questions. About how many questions would you predict the contestant to correctly answer?

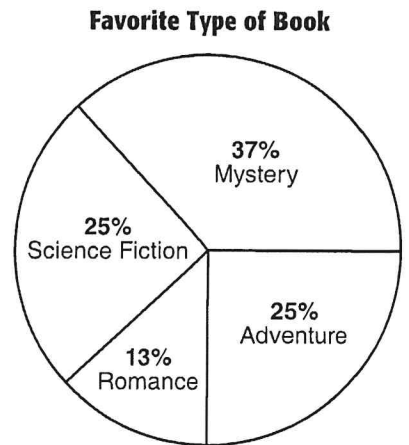
CHORES For Exercises 3–6, use the table to predict the number of students out of 528 that would say each of the following was their least favorite chore.

Least Favorite Chore	
Chore	Number of Students
Clean my room	7
Take out the garbage	4
Wash dishes	5
Walk the dog	3
Vacuum or dust	5

- | | |
|------------------|-------------------------|
| 3. clean my room | 4. wash dishes |
| 5. walk the dog | 6. take out the garbage |

7. BOOK The results of a survey asking teens their favorite type of book to read is shown.

- Out of 250 teens, predict how many would choose mystery as their favorite type of book to read.
- Out of 250 teens, predict how many would choose adventure as their favorite type of book to read.
- Out of 250 teens, predict how many would choose science fiction as their favorite type of book to read.



NAME _____

DATE

Thurs, 3/14: (Pg 2 ~ ALL Problems)

Homework Practice

Unbiased and Biased Samples **Week 1, Mar 11-15: Math HW**

Determine if each conclusion is valid. Justify your answer.

- To determine the most common injury cared for in an emergency room, a reporter goes to the same hospital every afternoon for one month during the summer and observes people entering the emergency room. She concludes that second degree sunburn is the most common injury.
- To evaluate customer satisfaction, a grocery store gives double coupons to anyone who completes a survey as they enter the store. The store manager determines that customers are very satisfied with their shopping experience in his store.
- To evaluate the integrity of underground water lines, the department of public works randomly selects 20 sites in the city to unearth and observe the water lines. At 5 of the sites, the water lines needed repair. The department of public works concludes that about one-fourth of underground water lines throughout the city need repair.

4. **DOWNLOADS** A guidance counselor asked students who owned mobile phones, which was the last type of download each one downloaded to their mobile phone. The results are shown in the table. If there are 420 students in the school, how many can be expected to download ringtones?

Mobile Phone Downloads	
Type	Frequency
Games	10
Ringtones	25
Screensavers	14
Music	36

- DENTISTRY** A survey is to be conducted to determine the reasons dental patients are hesitant to go to the dentist. Describe the sample and explain why each sampling method might not be valid.
 - Adults that are randomly selected from an office complex are asked to go online and fill out a questionnaire.
 - A randomly selected dentist asks his patients why they may be hesitant to go to a dentist.
 - Randomly selected dental patients who are having a routine check-up are asked to write down their feelings.