

PROBLEM-OF-THE-DAY: ALGEBRA 1
WEEK: August 20 to August 24 **DAY:** Friday

RISD Objective: Given a set of data, students will find the measures of central tendency and the range of the data.

PROBLEM #5

Ms. Purr surveyed the eighteen students in her 5th grade class as to the number of pets their family owned. She arranged the data into the frequency table seen below:

Number of pets

0	
1	
2	
3	
5	
7	
10	

Find the mean and the mode of the data. Which method of central tendency best describes the number of pets each student owns? Why?

MODEL SOLUTION #5

The mean is found by adding up all of the numbers and dividing by the number of students. In this case, the sum of the numbers is 45. Dividing this by 18 gives us $2\frac{1}{2}$.

The mode is the most frequently occurring number. In this case, it is 0.

I feel that $2\frac{1}{2}$ more accurately describes the number of pets each student's family owns. The majority of the class owns pets, and, even though 0 is the mode, it does not describe the majority of the students. So, I feel the mean is more accurate for describing the central tendency of this set of data.