

Practice - Part 2

Instructions: Answer each of the following practice questions on a separate piece of paper. Step by step solutions are provided under the Solutions tab. You will learn the material more thoroughly if you complete the questions before checking the answers under the Solutions tab in Moodle.

1. Eleven starting salaries for a company are listed in the table. The mean is $$54\,000$, the median is $$45\,000$, and the mode is $$35\,000$.

New Employee Starting Salary (in thousands of dollars)		
\$31		
\$35		
\$35		
\$39		
\$44		
\$45		
\$49		
\$61		
\$73		
\$85		
\$97		

Which measure of central tendency best represents the average starting salary?

- 2. Determine which measure of central tendency should be used in each of the following scenarios.
 - a. The amount of spending money (per week) of a group of grade 12 students is stated in the table of values below. Which measure of central tendency should be used to calculate the average amount of spending money per student?

Spending Money (dollars)		
5		
10		
10		
10		
20		
20		
30		
40		
500		



b. Parks Canada would like their mascot, Parka, to hold a sign on main street to advertise an upcoming event.

Time of Day	Number of Pedestrians
8:00 AM – 10:00 AM	175
10:00 AM – 12:00 PM	92
12:00 PM – 2:00 PM	110
2:00 PM – 4:00 PM	205
4:00 PM – 6:00 PM	158



Which measure of central tendency should be used to find the two-hour time slot that has the greatest amount of pedestrian traffic?

c. The fuel consumption for 10 hybrid cars of the same model were tested. The data is listed in the table below.

Fuel Consumption (L/100 km)	
5.6	
4.4	
4.5	
4.2	
4.5	
4.5	
4.8	
5.9	
4.5	
5.1	



Which measure of central tendency should be used to calculate the average fuel consumption in $L/100 \ km$?