**In Class**

**Statistics Lesson 4: Mean, Median, and Mode (Part 2)**

**Explore 1**

The table shows the number of aces served by tennis players in their first sets of a tournament. Use technology to find the mean, median, and modal amount of aces.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Number of aces | 1 | 2 | 3 | 4 | 5 | 6 |
| Frequency | 4 | 11 | 18 | 13 | 7 | 2 |

**Explore 2**

The table shows the petrol sales in one day by a number of city service stations.

|  |  |
| --- | --- |
| **Petrol sold, *L* (liters)** | **Frequency** |
| **2000 ≤ *L*<3000** | **4** |
| **3000 ≤ *L*<4000** | **4** |
| **4000 ≤ *L*<5000** | **9** |
| **5000 ≤ *L*<6000** | **14** |
| **6000 ≤ *L*<7000** | **23** |
| **7000 ≤ *L*<8000** | **16** |

a.) How many petrol stations were involved in the survey?

b.) Estimate the total amount of petrol sold for the day by the service stations.

c.) Find the approximate mean sales of petrol for the day.

**Explore 3**

A sample of 20 lobsters in the tank at the local Red Lobster measured for length. The results were:

|  |  |
| --- | --- |
| Length (L cm) | Frequency |
| 10 ≤ L < 15 | 3 |
| 15 ≤ L < 20 | 6 |
| 20 ≤ L < 25 | 5 |
| 25 ≤ L < 30 | 4 |
| 30 ≤ L < 35 | 2 |

a.) Approximate the mean length of the lobsters and state the modal class.