Grade 8

DATA MANAGEMENT AND PROBABILITY APPLICATIONS

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Play **Trade Race** http://www.fdb.cs.uoguelph.ca/colour/game/tradeRace/tradeRace.html here.
You may also go to www.cemc.uwaterloo.ca for the link.

1. Find the mean, median, mode and range.
   a. −6, 12, 23, −31, 23, −9
   b. 1.5, 8, 5.25, 24, 12
   c. −93.7, 3.8, −3.6, 19.2, 30.5, −28.5, −5.9

2. Mr Chester's grade 8 class decided to measure and record the length of every student hair. The information recorded is on the chart.

Student Number	Hair Length (cm)
1	7
2	10
3	8
4	9
5	12
6	7
7	7
8	13
9	8
10	7
11	11
12	30
13	11

   a. What are the mean, median, mode and range of hair length?
   b. i. If Mr Chester decided to include her hair length (38 cm) in the tally, what would be the new mean and median?
      ii. Is the mean or median more affected? Explain.

3. Bobby's long jump distances are as follows: 142 cm, 137 cm, 149 cm, and 152 cm.
   a. What is the mean of these distances?
   b. How far must Bobby jump on his next trial to achieve a mean distance of 154?

4. With a single die, what is the probability of rolling each of the following?
   a. a 5
   b. an even number
   c. a number less than 5
   d. a number greater than 2

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