Lesson 12 Practice Problems

1. Suppose you are interested in learning about how much time seventh grade students at your school spend outdoors on a typical school day.

   Select **all** the samples that are a part of the population you are interested in.

   A. The 20 students in a seventh grade math class.

   B. The first 20 students to arrive at school on a particular day.

   C. The seventh grade students participating in a science fair put on by the four middle schools in a school district.

   D. The 10 seventh graders on the school soccer team.

   E. The students on the school debate team.

2. For each sample given, list two possible populations they could belong to.

   a. Sample: The prices for apples at two stores near your house.

   b. Sample: The days of the week the students in your math class ordered food during the past week.

   c. Sample: The daily high temperatures for the capital cities of all 50 U.S. states over the past year.

3. If 6 coins are flipped, find the probability that there is at least 1 heads.

   (From Unit 8, Lesson 9.)

4. A school's art club holds a bake sale on Fridays to raise money for art supplies. Here are the number of cookies they sold each week in the fall and in the spring:

fall	20	26	25	24	29	20	19	19	24	24
spring	19	27	29	21	25	22	26	21	25	25

    a. Find the mean number of cookies sold in the fall and in the spring.

    b. The MAD for the fall data is 2.8 cookies. The MAD for the spring data is 2.6 cookies. Express the difference in means as a multiple of the larger MAD.

    c. Based on this data, do you think that sales were generally higher in the spring than in the fall?

(From Unit 8, Lesson 11.)

5. A school is selling candles for a fundraiser. They keep 40% of the total sales as their commission, and they pay the rest to the candle company.

price of candle	number of candles sold
small candle: $11	68
medium candle: $18	45
large candle: $25	21

How much money must the school pay to the candle company?

(From Unit 4, Lesson 11.)

Grade 7 Unit 8
Lesson 12

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