Puppy Love

Ian’s beagle had a litter of puppies. Ian, a budding statistician, decided to keep track of some data about the puppies. Here is some information Ian collected about his puppies:

- There were 4 female and 3 male puppies in the litter.
- The median birth weight of the puppies was 14 ounces.
- The mean birth weight of the puppies was 15 ounces.
- The mode birth weight of the puppies was 14 ounces.
- The range of the birth weights was 8 ounces.

1. Determine the possible weights for Ian’s puppies. Find another set of puppy weights that matches the information given. Explain your strategy.

2. Ian weighed the puppies 1 week after they are born. He discovered that all the puppies had gained exactly 8 ounces. How will the median, mean, mode, and range of the puppies’ weights compare with those of the puppies’ weights at birth?

3. Ian weighed the puppies again after another week. He discovered that 3 of the puppies had each gained 10 ounces, 2 puppies had each gained 16 ounces, and 2 puppies that were sick each lost 3 ounces. What was the mean weight of the puppies after this last weighing?

CCSSM: 6.SP.2; 6.SP.3; 6.SP.5.c; 7.SP.3; and 7.SP.4
SMP: 1, 2, 3, 7, and 8

(Answers on page 383)