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In these activities you will work together to explore mean as "fair share." After completing each activity, discuss and/or present your findings to the rest of the class.

1. What possible fraction of bags will come up when there are 6 dogs? Make a table similar to the table in the Class Discussion. Fill in the table, and then explain how you can tell by looking at the number of bags.

| Extra Bags | Split | Fraction per Dog |
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## Activity 2 [Page 1.4]

1. Alyssa had 2 dogs with 10 bags of dog food, 1 dog with 8 bags, 2 dogs with 5 bags of food, and 1 dog with no bags of food. Simone had 3 dogs with 4 bags of dog food, 1 dog with 12 bags of food, and 2 dogs with 7 bags of food. Alyssa claimed they should both get the same mean. Simone argued that they had very different problems so the means would not be the same. Who is right and why? Use the TNS activity to support your thinking.
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2. Explain the difference between finding the mean on page 1.3 and finding the mean on page 1.5.
3. Find the mean number of bags of dog food for each of the following. Use either page in the TNS activity to help your thinking.
a. 5 dogs, 18 bags of dog food
b. 4 dogs, 17 bags of dog food
c. One dog has 6 bags of dog food, a second has 3 bags of dog food, a third has 2 bags of dog food and a fourth has 9 bags of dog food
d. Two dogs each having 11 bags of dog food, one dog has 7 bags of dog food, three dogs each have 9 bags of dog food
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4. Which of the following strategies make sense for finding the mean? Explain why or why not in each case.
a. Divide the number of bags of dog food by the number of dogs.
b. Take one bag and divide it equally among the dogs. Multiply the fraction share each dog received by the total number of bags.
c. Find the largest multiple of the number of dogs that will go into the number of bags of dog food. Subtract that number from the number of bags and figure out what fractions to split the number of bags in the difference so each dog has the same fraction.
5. Which of the correct strategies in the question above seems to be the most efficient? Explain your thinking.
