Model Equivalent Fractions

Solve. Use fraction circles.

1. Billy bought a blueberry pie that is divided into sixths. Charlie bought a same-size blueberry pie that is divided into thirds. Billy ate two slices. Charlie ate the same amount of his pie. What fraction describes the amount of the pie that Charlie ate?

2. Six of the eight dolls that Deb owns are ceramic. For her birthday, Deb received four more dolls. Of those dolls, an equivalent fraction is ceramic. What fraction describes the part of Deb’s birthday dolls that are ceramic?

3. A race is 5 miles. There are water stops every $\frac{1}{3}$ mile. How many water stops are there in all?

4. Frannie has $1\frac{4}{6}$ pizzas remaining after a party. John said that Frannie had $1\frac{2}{3}$ pizzas remaining. Luther said that Frannie had $1\frac{8}{12}$ pizzas remaining. Who is correct: John, Luther, both, or neither? Explain.

5. I am an improper fraction less than 2. When I’m written as an improper fraction in simplest form, my denominator is a prime number and my numerator has factors of 2 and 3. My numerator and denominator are not in simplest form. The sum of my numerator and denominator are 22. What improper fraction am I?

6. I am a mixed number less than 2. When I’m written as an improper fraction in simplest form, both my numerator and denominator are prime numbers. As an improper fraction, the sum of my numerator and denominator is 12. What mixed number am I?