## Maths with Melissa

## Ratio to Fraction Worded Problems Worksheet

Solve each problem below. Show your working for each question.

- 1. In a class of 30 students, the ratio of boys to girls is 2:3. What fraction of the class are girls?
- 2. A recipe uses flour and sugar in the ratio 5:2. What fraction of the total mixture is sugar?
- 3. The sides of a triangle are in the ratio 3:4:5. What fraction of the triangle's perimeter does the longest side represent?
- 4. There are red, blue, and green balls in a bag in the ratio 4:5:6. What fraction of the balls are blue?
- 5. In a survey, the ratio of people who prefer tea to those who prefer coffee is 7:8. What fraction of the surveyed people prefer tea?
- 6. The ratio of apples to oranges in a fruit basket is 3:7. What fraction of the fruit are apples?
- 7. A school library has fiction and non-fiction books in the ratio 9:11. What fraction of the books are non-fiction?
- 8. The ratio of cats to dogs in a pet shelter is 5:9. What fraction of the animals are dogs?
- 9. In a football match, the number of home fans to away fans is in the ratio 11:2. What fraction of the fans are away fans?
- 10. The ratio of blue pens to black pens in a box is 4:1. What fraction of the pens are blue?

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## **Answer Key**

- 1. Fraction of girls:  $\frac{3}{5}$
- 2. Fraction of sugar:  $\frac{2}{7}$
- 3. Fraction for longest side:  $\frac{5}{12}$
- 4. Fraction of blue balls:  $\frac{5}{15} = \frac{1}{3}$
- 5. Fraction who prefers tea:  $\frac{7}{15}$
- 6. Fraction of apples:  $\frac{3}{10}$
- 7. Fraction of non-fiction books:  $\frac{11}{20}$
- 8. Fraction of dogs:  $\frac{9}{14}$
- 9. Fraction of away fans:  $\frac{2}{13}$
- 10. Fraction of blue pens:  $\frac{4}{5}$