

Classes and Objects 3

Continue from the `Fraction` class

1. If `p` and `q` are both variables of type `Fraction`, under what circumstances will the expression `p == q` have the value `true`?
2. Suppose that `p` and `q` are both of type `Fraction` with `p` representing $\frac{2}{3}$ and `q` representing $\frac{1}{6}$.
 - a) Draw a diagram like those shown in class to illustrate this situation.
 - b) If the statement `p = q;` is executed, draw a diagram to illustrate the result.
3. Write a definition of an `equals` method for the `Fraction` class. Your method should return `true` if and only if the `Fraction` objects being compared represent *equivalent* fractions.
4. Write the `toString` method for the `Fraction` class which allows an `Fraction` object to be outputted in the form `<num>/<den>`, e.g., `2/3`