# OPERATIONS WITH FRACTIONS

1. Compare the fractions. Which one is greater?

   $\frac{4}{9}$ and $\frac{14}{9}$ $\qquad$ $\frac{43}{41}$ and 1 $\qquad$ $\frac{30}{6}$ and $\frac{30}{7}$

2. Write as a mixed number

   a) $5+\frac{3}{4}$ $\qquad$ b) $15+\frac{22}{27}$ $\qquad$ c) $11+\frac{10}{13}$

3. Maria planned to complete her homework in 45 minutes. But in fact, spent $\frac{7}{5}$ of the planned time. How much time did it take Maria to do her homework?

4. Determine the value of $x$ that will make each equality true

   a) $\frac{15}{x}=\frac{5}{7}$ $\qquad$ b) $\frac{x}{10}=\frac{1.3}{1.5}$

5. Evaluate each of the following. Reduce to simplest form.

   a) $\frac{2}{7}+\frac{3}{4}$ $\qquad$ b) $\frac{12}{13}+\frac{1}{2}$ $\qquad$ c) $\frac{14}{25}-\frac{2}{5}$ $\qquad$ d) $2-\frac{7}{15}$

6. Evaluate the following. Reduce to simplest form.

   $(1+\frac{1}{2})\times(\frac{1}{3}-1)\times(1+\frac{1}{4})\times(\frac{1}{5}-1)\times(1+\frac{1}{6})$

7. When dividing one fraction by another fraction, we multiply the first fraction by the **reciprocal** of the second fraction. Wy is that? Can you explain?

The word “ratio” comes from Latin and means “relative value" or "quantitative relation”. Fractions are “rational numbers”, because they demonstrate quantitative relation between two values. In a fraction, both the numerator and denominator are whole numbers, where the denominator is not zero. In a rational number, the numerator and denominator are integers (positive or negative) and the denominator cannot equal to zero.