

## 6. Multiplikation von Brüchen

Name \_\_\_\_\_

### kreuzweise kürzen

Schreibe die Brüche auf einen Bruchstrich. Prüfe anschließend, ob sich die Brüche untereinander oder kreuzweise kürzen lassen.

**Aufgepasst:** Manchmal lassen sie sich auch noch ein 2. Mal kürzen.

#### Beispielaufgabe

$$\frac{10}{12} \cdot \frac{9}{15} = \frac{\cancel{10}}{\cancel{12}} \cdot \frac{\cancel{9}}{\cancel{15}} = \frac{1}{2}$$

The diagram shows the cancellation of common factors in the multiplication of two fractions. The top fraction is  $\frac{10}{12}$  and the bottom fraction is  $\frac{9}{15}$ . The numbers 10 and 15 are crossed out with a diagonal line. The number 10 is circled in green and has a '1' written above it. The number 15 is circled in green and has a '1' written above it. The number 12 is circled in orange and has a '2' written below it. The number 9 is circled in orange and has a '3' written above it. The number 4 is circled in yellow and has a '2' written below it. The number 3 is circled in purple and has a '1' written below it. The resulting simplified fraction is  $\frac{1}{2}$ .

$$1.) \quad \frac{6}{15} \cdot \frac{10}{8} =$$

$$\frac{1}{2}$$

$$2.) \quad \frac{8}{21} \cdot \frac{9}{12} =$$

$$\frac{2}{7}$$

$$3.) \quad \frac{3}{28} \cdot \frac{12}{18} =$$

$$\frac{1}{14}$$

$$4.) \quad \frac{2}{12} \cdot \frac{9}{15} =$$

$$\frac{1}{10}$$

$$5.) \quad \frac{15}{9} \cdot \frac{45}{50} =$$

$$\frac{3}{2}$$

$$6.) \quad \frac{2}{32} \cdot \frac{8}{6} =$$

$$\frac{1}{12}$$

$$7.) \quad \frac{20}{15} \cdot \frac{6}{8} =$$

$$\frac{1}{1}$$