

Fractions Review 2

	Fractions/whole numbers	Mixed numbers
Simplifying	$\frac{12}{15} = \frac{4}{5}$	$\frac{84}{120} = \frac{42}{60} = \frac{7}{12}$
	<ul style="list-style-type: none"> • Divide the numerator and the denominator by a same number. 	<ul style="list-style-type: none"> • You can simplify in many steps.
Multiplication	$\frac{1}{7} \times \frac{8}{9} = \frac{8}{63}$ $4 \times \frac{3}{7} = \frac{4 \times 3}{7} = \frac{12}{7} = 1 \frac{5}{7}$ $\frac{5}{6} \times \frac{6}{7} = \frac{5}{7}$ $\frac{1}{7} \times \frac{3}{8} = \frac{1 \times 3}{7 \times 8} = \frac{3}{14}$	$1 \frac{1}{5} \times 4 \frac{3}{8} = \frac{6}{5} \times \frac{35}{8} = \frac{21}{4} = 5 \frac{1}{4}$
	<ul style="list-style-type: none"> • Simply multiply the numerators and the denominators. • Simplify before multiplying to make the calculation easier. 	<ul style="list-style-type: none"> • Convert to fractions before multiplying.
Division	$\frac{4}{5} \div 7 = \frac{4}{5} \times \frac{1}{7} = \frac{4}{35}$ $\frac{2}{3} \div \frac{1}{9} = \frac{2}{3} \times 9 = \frac{2 \times 9}{3} = \frac{18}{3} = 6$ $\frac{6}{7} \div \frac{3}{5} = \frac{6}{7} \times \frac{5}{3} = \frac{30}{21} = \frac{10}{7} = 1 \frac{3}{7}$	$2 \frac{3}{10} \div 1 \frac{1}{6} = \frac{23}{10} \div \frac{7}{6} = \frac{23}{10} \times \frac{6}{7}$ $= \frac{23}{10} \times \frac{6}{7} = \frac{23 \times 3}{5 \times 7} = \frac{69}{35} = 1 \frac{34}{35}$
	<ul style="list-style-type: none"> • Instead of dividing, multiply by the reciprocal number. • Always give the final answer as mixed number and simplify it if possible. 	<ul style="list-style-type: none"> • Convert to fractions before dividing.

1. Simplify, or write the fractions in lowest terms.

a. $\frac{6}{12} =$

b. $\frac{4}{10} =$

c. $\frac{8}{10} =$

d. $\frac{6}{9} =$

e. $\frac{2}{8} =$

f. $\frac{12}{16} =$

g. $\frac{9}{18} =$

h. $\frac{5}{15} =$

i. $\frac{10}{100} =$

j. $\frac{40}{100} =$

2. Multiply.

a. $4 \times \frac{1}{3}$

b. $7 \times \frac{2}{5}$

c. $\frac{4}{11} \times 5$

d. $\frac{5}{6} \times 10$

e. $\frac{2}{7} \times \frac{5}{6}$

f. $\frac{3}{4} \times \frac{11}{15}$

g. $\frac{4}{10} \times \frac{1}{3}$

h. $\frac{5}{8} \times \frac{2}{5}$

i. $\frac{4}{20} \times \frac{10}{12}$

3. Multiply.

a. $1 \frac{1}{6} \times 5 \frac{2}{3}$

b. $2 \frac{5}{9} \times \frac{3}{4}$

c. $3 \times 2 \frac{2}{5}$

d. $10 \frac{3}{10} \times 7$

e. $\frac{4}{9} \times 2 \frac{1}{8}$

f. $5 \frac{2}{5} \times 1 \frac{8}{9}$

g. $2 \frac{4}{10} \times 3 \frac{3}{4}$

h. $2 \frac{5}{11} \times 1 \frac{5}{6}$

i. $\frac{7}{4} \times 3 \frac{1}{5}$