

MORE PRACTICE WITH FRACTIONS

An example has been done in each section. Be sure to use the solution as a template for your own solutions.

1. Multiplying Fractions

- make sure you simplify before you multiply
- note: in the example the 15 and the 10 have the common factor 5

$$\frac{10}{7} \times \frac{8}{15}$$

$$\frac{2}{5} \times \frac{9}{7}$$

$$\frac{2}{3} \times \frac{6}{5}$$

$$\frac{4}{21} \times \frac{14}{3}$$

$$\frac{5}{6} \times \frac{9}{10}$$

$$\text{a) } = \frac{2}{7} \times \frac{8}{3}$$

$$\text{b) } =$$

$$\text{c) } =$$

$$\text{d) } =$$

$$\text{e) } =$$

$$= \frac{16}{21}$$

$$=$$

$$=$$

$$=$$

$$=$$

2. Dividing Fractions

-multiply the first fraction(or the one on top) by the reciprocal of the second fraction(or the one on the bottom)

-note: in the example the 5 and the 30 have the common factor 5...also, the reciprocal of 30 over 7 is 7 over 30.

$$\frac{5}{12} \div \frac{30}{7}$$

$$\frac{\frac{5}{12}}{\frac{30}{7}}$$

$$\frac{11}{4} \div \frac{13}{12}$$

$$\frac{11}{4} \div \frac{13}{12}$$

$$\frac{\frac{9}{8}}{\frac{6}{4}}$$

$$= \frac{5}{12} \times \frac{7}{30}$$

$$= \frac{5}{12} \times \frac{7}{30}$$

$$=$$

$$=$$

$$=$$

a)

OR

b)

c)

d)

$$= \frac{1}{12} \times \frac{7}{6}$$

$$= \frac{1}{12} \times \frac{7}{6}$$

$$=$$

$$=$$

$$=$$

$$= \frac{7}{72}$$

$$= \frac{7}{72}$$

$$=$$

$$=$$

$$=$$

$$=$$

3. Adding and Subtracting Fractions

-make sure your common denominator is the lowest common multiple of the denominators

-note: in the example, 18 is the lowest common multiple of 6 and 9

$\frac{5}{6} - \frac{4}{9}$	$\frac{5}{7} + \frac{3}{14}$	$\frac{13}{15} - \frac{7}{10}$	$\frac{7}{12} - \left(-\frac{5}{18}\right)$
		=	=
$= \frac{5\left(\frac{3}{3}\right) - 4\left(\frac{2}{2}\right)}{6\left(\frac{3}{3}\right) - 9\left(\frac{2}{2}\right)}$	=		
a) $= \frac{15}{18} - \frac{8}{18}$	b) $=$	c) $=$	d) $=$
	=		
$= \frac{7}{18}$	=	=	=
	=	=	=

4. Adding, Subtracting, Dividing and Multiplying

-note: from the 3rd to the 4th step in the example we've gone from dividing by a number to multiplying by its reciprocal...the reciprocal of 6 is one over 6.

$\frac{\frac{5}{2} - \frac{3}{7}}{6}$			$\frac{1}{7} - \left(-\frac{1}{6}\right)$
$= \frac{5\left(\frac{7}{7}\right) - 3\left(\frac{2}{2}\right)}{2\left(\frac{7}{7}\right) - 7\left(\frac{2}{2}\right)}$	$\frac{\frac{3}{4} - \frac{2}{5}}{3}$	$\frac{5}{6} + \left(-\frac{4}{5}\right)$	$\frac{1}{3} + \frac{2}{7}$
$= \frac{35 - 6}{14 - 14}$	=	=	=
$= \frac{29}{14} \times \frac{1}{6}$	b) $=$	c) $=$	d) $=$
$= \frac{29}{84}$	=	=	=
	=	=	=
	=	=	=