November 7, 2016 10:50 PM

Name:		Date:
Math 8	Review 2a to 2.3: Adding, Subtracting	, and Multiplying Fractions
the lowest common multiple then find the smallest one th	. One way to find the LCD or LCM is to $\boldsymbol{I}$	vest common denominator. This is like fir ist out all the multiples of both numbers
a) 4 and 6	b) 3 and 9	c) 8 and 6
d)10 and 12	e) 12 <i>and</i> 15	f) 18 and 12
g) 4, 5, and 6	h) 6, 8, and 10	i) 8, 9, and 12
2. Add or subtract the f		
a) $\frac{5}{9} + \frac{40}{72}$	b) $\frac{3}{18} + \frac{25}{30}$	c) $\frac{10}{21} + \frac{22}{28}$
d) $1\frac{2}{5} + 3\frac{2}{20}$	e) $1\frac{5}{17} - \frac{38}{51}$	f) $\frac{34}{39} - \frac{55}{78}$
g) $2\frac{1}{5} + 3\frac{2}{4} - 2\frac{7}{3}$	h) $-3\frac{1}{4} + 3\frac{2}{3} + 1\frac{1}{2}$	i) $4\frac{7}{8} - 2\frac{9}{10} - 2\frac{13}{20}$

Note: When simplifying, reducing, or multiplying fractions, reduce them using the greatest common factor. A factor is a value that a number can be divided evenly into. The GCF is the largest factor that both numbers can be divided into. One way to do this is to list out all the factors both for numbers:

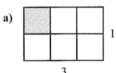
3. Find the greatest common factor for each set of numbers:

a) 18 and 12	b) 45 and 25	c) 36 and 60
d) 45 and 60	e) 34 <i>and</i> 51	f) 25 and 75
uj 43 unu 00	ej 54 ana 51	1) 25 and 15
g) 45, 60, and 90	h) 24, 36, and 18	i) 40, 80, <i>and</i> 140
	, - , - ,	,,,

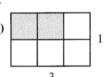
4. Simplify each fraction into lowest terms:

a) $\frac{20}{25}$	b) $\frac{72}{54}$	c) $\frac{49}{21}$	d) $\frac{90}{27}$	e) $\frac{24}{80}$
f) $\frac{77}{55}$	g) $\frac{120}{30}$	h) $\frac{72}{99}$	i) $\frac{55}{45}$	j) 216 108

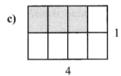
Determine the area of the shaded portion of the rectangle.

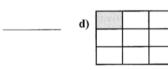












5. Find the equivalent mixed fraction.

**g)**  $\frac{100}{9}$ 

**h)**  $\frac{137}{10}$ 

i)  $\frac{41}{11}$ 

\_\_\_\_\_ j) <sup>9</sup>

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**k**)  $\frac{31}{13}$ 

\_\_\_\_\_ **I)**  $\frac{43}{14}$ 

\_\_\_\_

**m)**  $\frac{71}{15}$ 

\_\_\_\_\_ n)  $\frac{3}{10}$ 

...

**o)**  $\frac{49}{17}$ 

\_\_\_\_\_p)

6. Multiply. Leave answer in mixed fractional form.

a)  $5 \cdot 3\frac{2}{5}$ 

**b)**  $8 \times 5\frac{1}{4}$ 

c)  $9 \cdot 3\frac{2}{3}$ 

\_\_\_\_\_ d)  $\frac{2}{3} \times 2\frac{2}{5}$ 

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e)  $\frac{2}{7} \cdot 8\frac{3}{4}$ 

\_\_\_\_\_ f)  $\frac{4}{5} \times 8\frac{1}{3}$ 

**g)**  $6\frac{2}{3} \cdot 1\frac{4}{5}$ 

\_\_\_\_\_ **h)**  $4\frac{1}{8} \times 9\frac{1}{3}$ 

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- 5. A recipe calls for  $\frac{4}{5}$  of a cup of sugar. How much sugar would be required to make  $\frac{3}{4}$  of the recipe?
- 6. If it takes  $\frac{3}{4}$  of a litre of paint to paint a chair, how much paint is required to paint 12 chairs of the same
- 7. A house worth \$328 000 is assessed for  $\frac{7}{8}$  of its value. What is the assessed value of the house?
- 8. Of the students in a high school, <sup>4</sup>/<sub>5</sub> have cell phones, and <sup>1</sup>/<sub>4</sub> of the students with cell phones play on a school team. What fraction of students in the high school play on a school team?

i)  $3\frac{5}{7} \cdot 2\frac{3}{5}$ 

- \_\_\_\_\_ **j**)  $4\frac{5}{19} \times 40\frac{1}{9}$

**k)**  $4\frac{8}{23} \cdot 5\frac{3}{50}$ 

- \_\_\_\_\_ I)  $5\frac{7}{11} \times 3\frac{28}{31}$

- **m)**  $22\frac{3}{13} \cdot 9\frac{16}{17}$
- n)  $6\frac{4}{13} \times 12\frac{1}{14}$

**o)**  $5\frac{17}{35} \cdot 1\frac{11}{24}$ 

- **p)**  $7\frac{1}{5} \times 3\frac{1}{8} \times 4$

- Multiply and simplify if possible.
  - a)  $\frac{1}{4} \cdot \frac{5}{7} \cdot \frac{3}{8}$

**b)**  $\frac{4}{9} \times \frac{5}{8} \times \frac{3}{15}$ 

c)  $\frac{5}{36} \cdot \frac{28}{3} \cdot \frac{6}{5}$ 

d)  $\frac{5}{6} \times \frac{54}{11} \times \frac{3}{25}$ 

e)  $\frac{18}{121} \cdot \frac{11}{36} \cdot \frac{12}{33}$ 

f)  $\frac{3}{32} \times \frac{21}{56} \times \frac{64}{15}$ 

g)  $\frac{6}{14} \cdot \frac{7}{45} \cdot \frac{15}{21} \cdot \frac{147}{7}$ 

**h)**  $\frac{7387}{8633} \times \frac{485}{581}$ 

- The sales tax on a car in BC is  $\frac{3}{25}$  of the price of the car. What is the total amount a person would pay for a \$28 350 car?
- 10. A sheet of paper is  $\frac{27}{4}$  inches wide, by  $\frac{26}{3}$  inches long. What is the area of the piece of paper?