

Name: \_\_\_\_\_

Date: \_\_\_\_\_

**Math 8 HW Section 2.2 Multiplying Proper Fractions**

1. Simplify each of the fractions to lowest terms:

a) $\frac{8}{12}$	b) $\frac{15}{25}$	c) $\frac{24}{36}$	d) $\frac{36}{63}$	e) $\frac{56}{49}$	f) $\frac{48}{84}$
g) $\frac{65}{117}$	h) $\frac{150}{105}$	i) $\frac{224}{36}$	j) $\frac{24}{96}$	k) $\frac{81}{135}$	l) $\frac{720}{1080}$

2. Multiply each of the following by using the area model:

a) $\frac{1}{2} \times \frac{1}{3}$ 	b) $\frac{2}{3} \times \frac{4}{5}$ 	c) $\frac{4}{7} \times \frac{1}{6}$ 
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3. Multiply each of the following without a calculator:

a) $\frac{2}{3} \times \frac{4}{5}$	b) $\frac{4}{6} \times \frac{3}{4}$	c) $\frac{12}{7} \times \frac{14}{9}$	d) $\frac{25}{24} \times \frac{16}{15}$
e) $\frac{12}{18} \times \frac{27}{15}$	f) $\frac{45}{39} \times \frac{26}{27}$	g) $\frac{55}{56} \times \frac{48}{45}$	h) $\frac{12}{28} \times \frac{15}{8} \times \frac{2}{9}$
i) $\frac{77}{14} \times \frac{45}{11} \times \frac{12}{81}$	j) $\frac{26}{24} \times \frac{12}{14} \times \frac{56}{65}$	k) $\frac{25}{21} \times \frac{54}{11} \times \frac{28}{15} \times \frac{22}{18}$	l) $\frac{14}{27} \times \frac{18}{40} \times \frac{36}{15} \times \frac{32}{21}$

4. Johnny's gas tank is  $\frac{8}{15}$  full. He uses  $\frac{3}{4}$  of the gas he has to drive to work. If his car can hold 90L of gas, how much gas did he use to get to work?
  
5.  $\frac{4}{5}$  of the students are passing in Science class and  $\frac{1}{3}$  of these students are getting A's. What fractions of students are getting A's?
  
6. In Mr. T's class of 60 students, a quarter of them have blonde hair and three-fifths of them are boys. How many students in Mr. T's class are boys with blonde hair?
  
7. Albert spent  $\frac{1}{5}$  of his savings on a new computer. Later that week, he spent  $\frac{1}{2}$  of the rest on another desktop computer. What fraction of his original savings did he have left?
  
8. Jenny has a purse of coins.  $\frac{3}{7}$  of the coins are pennies.  $\frac{1}{8}$  of the other coins are quarters. If there are 15 quarters, how many coins pennies does she have?
  
9. Shirley bought a bunch of donuts and left it in the common room. Mike arrives and eats  $\frac{1}{3}$  of all the donuts. Then Eva arrives and eats  $\frac{1}{4}$  of what remained. If there was 3 donuts left, how many donuts did Shirley buy?