Name **Key**   Date _____ Pd __

CYU 1.3 Fractions & Mixed Numbers Day ONE

☑ Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

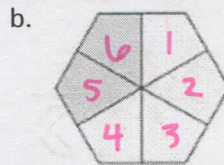**X** Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

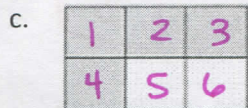| CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Fractions	1		
Product of primes	2		
Simplest Form/Lowest Terms	3		
Multiply fractions	4		
Divide fractions	5		

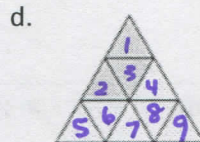1. Represent the shaded part of each geometric figure by a fraction.

   a. $\frac{9}{12}$ or $\frac{3}{4}$

   b. $\frac{2}{6} = \frac{1}{3}$
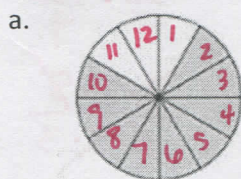
   c. $\frac{4}{6}$ or $\frac{2}{3}$

   d. $\frac{3}{9} = \frac{1}{3}$

2. Write each number as a product of primes.

   a. 33
   $3 \wedge 11$
   $\boxed{3 \cdot 11}$

   b. 98
   $49 \wedge 2$
   $7 \wedge 7$
   $\boxed{2 \cdot 7 \cdot 7}$

   c. 20
   $4 \wedge 5$
   $2 \wedge 2$
   $\boxed{2 \cdot 2 \cdot 5}$

   d. 75
   $3 \wedge 25$
   $5 \wedge 5$
   $\boxed{3 \cdot 5 \cdot 5}$

   e. 45
   $5 \wedge 9$
   $3 \wedge 3$
   $\boxed{3 \cdot 3 \cdot 5}$

3. Write the fraction in lowest terms.

   a. $\frac{2}{4} \div 2$ b. $\frac{10}{15} \div 5$ c. $\frac{3}{7}$ prime   d. $\frac{18}{30} \div 6$ e. $\frac{120}{244} \div 4$

   $\boxed{\frac{1}{2}}$ $\boxed{\frac{2}{3}}$ $\boxed{\frac{3}{7}}$ $\boxed{\frac{3}{5}}$ $\boxed{\frac{30}{61}}$

4. Multiply & Simplify.

   a. $\frac{1}{2} \cdot \frac{3}{4} = \frac{1 \cdot 3}{2 \cdot 2 \cdot 2}$ b. $\frac{2}{3} \cdot \frac{3}{4} = \frac{2 \cdot 3}{3 \cdot 2 \cdot 2}$ c. $\frac{7}{10} \cdot \frac{5}{21} = \frac{7 \cdot 5}{2 \cdot 5 \cdot 3 \cdot 7}$ d. $\frac{25}{9} \cdot \frac{1}{3} = \frac{5 \cdot 5}{3 \cdot 3 \cdot 3}$

   $\boxed{\frac{3}{8}}$ $\boxed{\frac{1}{2}}$ $\boxed{\frac{1}{6}}$ $\boxed{\frac{25}{27}}$

5. Divide & Simplify. KCF

   a. $\overset{K \ \ C \ \ F}{\frac{1}{2} \div \frac{7}{12}}$ b. $\overset{K \ \ C \ \ F}{\frac{3}{4} \div \frac{1}{20}}$ c. $\overset{K \ \ C \ \ F}{\frac{7}{12} \div \frac{1}{2}}$ d. $\overset{K \ \ C \ \ F}{\frac{3}{5} \div \frac{9}{10}}$

   $\frac{1}{2} \cdot \frac{12}{7}$ $\frac{3}{4} \cdot \frac{20}{1}$ $\frac{7}{12} \cdot \frac{2}{1}$ $\frac{3}{5} \cdot \frac{10}{9}$

   $\frac{1 \cdot 3 \cdot 2 \cdot 2}{2 \cdot 7}$ $\frac{3 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2}$ $\frac{7 \cdot 2}{2 \cdot 2 \cdot 3}$ $\frac{3 \cdot 2 \cdot 5}{5 \cdot 3 \cdot 3}$

   $\boxed{\frac{6}{7}}$ $\boxed{15}$ $\boxed{\frac{7}{6}}$ $\boxed{\frac{2}{3}}$

CYU Reflection: *How far can you go: basic, intermediate, or advanced?*

Rate your mastery level!
How confident are you with the skills this CYU covered? Circle the score you would give yourself.

| 1 2 | 3 4 5 | 6 7 | 8 |
| Basic | Intermediate | Advanced | Solved ALL! |