Unit 3: Rational Numbers Name:_____

Pre-Algebra: Practice Test Hour:_____

3.1 I can find the factors of a composite numbers. List all the factors for each number and then state whether the number is prime or composite.	
1. 36	2. 19
3. 42	4. 22
5. 12	6. 47
3.1 I can write the prime factorization of a number.	
7. 54	8. $9x^3y$
9. 100	10. $16x^2y^2$
	Score:_____%

3.2 I can find the Greatest Common Factor and Least Common Multiple. Find the GCF and LCM for each set of numbers,

1. $6 \text{ and } 15$		2. $24 \text{ and } 36$	
GCF:	LCM:	GCF:	LCM:
3. $22 \text{ and } 55$		4. $7 \text{ and } 12$	
GCF:	LCM:	GCF:	LCM:
5. $14m^2 \text{ and } 21m$		6. $16st^3 \text{ and } 24s^2t$	
GCF:	LCM:	GCF:	LCM:
		Score:_____%	

3.3 I can write fractions as mixed numbers and as improper fractions. If it is a mixed number, rewrite it as an improper fraction. If it is an improper fraction, rewrite it as a mixed number.

1. $1\frac{3}{8}$	2. $-\frac{10}{7}$
3. $\frac{-45}{7}$	4. $-3\frac{4}{5}$
5. $2\frac{5}{9}$	6. $\frac{52}{10}$

3.3 I can simplify each fraction to lowest terms. Show your work.

7. $\frac{21}{27}$	8. $-\frac{14}{35}$
9. $\frac{60x^3y}{40x^2y^2}$	10. $\frac{30mn^3}{21mn}$
	Score:_____%

3.4: I can write a fraction as a decimal.	
1. $-\frac{8}{9}$.	2. $7\frac{3}{5}$
3. $\frac{18}{5}$	4. $-1\frac{8}{15}$
5. $4\frac{1}{20}$	6. $-4\frac{2}{9}$
3.4: I can write a decimal as a fraction. Reduce your fractions!	
7. 0.15	8. 0.38
9. 1.43	10. $-0.\overline{7}$
11. -0.99	12. $5.\overline{5}$
	Score:_____

3.5 I can add and subtract fractions. Make sure your fractions are in lowest terms.	
1. $\frac{5}{13} - \left(-\frac{12}{13}\right)$	2. $-\frac{7}{20} - \frac{3}{8}$
3. $-2\frac{1}{4} + \frac{5}{7}$	4. $5\frac{3}{8} + \left(-\frac{1}{6}\right)$
	Score:_____%

3.6 I can multiply fractions. Make sure your fraction is in lowest terms.

1. $-\frac{20}{33} * \left(-\frac{3}{11}\right)$

2. $\frac{4}{15} * 9$

3. $-3\frac{1}{7} * 1\frac{1}{2}$

4. $2\frac{1}{6} * 3\frac{3}{4}$

5. $\frac{20x}{9} \cdot \frac{36x^4}{5}$

6. $-\frac{6x^2}{25} \cdot \left(-\frac{5x}{3}\right)$

Score:_____%

3.7 I can divide fractions. Make sure your fraction is in lowest terms.

1. $\frac{7}{20} \div \frac{5}{6}$

2. $\frac{-11}{24} \div \frac{7}{10}$

3. $-\frac{8}{15} \div 4$

4. $-\frac{9}{10} \div \left(-\frac{10}{9}\right)$

Score:_____%