Unit 0 Prerequisites from Prior Courses (Review) Notes Day 4

Name $\qquad$
Fractions (PH ALG Skills Review pages 724 - 727)
Fractions name a part of a whole. The region below is divided into ten equal parts. Six of these parts are shaded. This is equivalent to the fraction $\frac{6}{10}$.

$\frac{6}{10} \leftarrow$ Numerator $\quad$ Denominator $\quad$ Read: six tenths

When working with fractions there are many ways to represent the same value.
For example, the same shaded area can be represented in the following way.


This is the fraction $\qquad$ . So, $\qquad$ and $\qquad$ are equal.

Example 1: Write five equivalent fractions for $\frac{3}{5}$.

Example 2: Write $\frac{8}{24}$ in simplest form.

Example 3: Write each mixed number as an improper fraction.
a. $5 \frac{1}{4}$
b. $3 \frac{2}{3}$

Example 4:

$$
\text { a. Add. } \frac{4}{5}+\frac{3}{5}
$$

b. Subtract. $\frac{5}{9}-\frac{2}{9}$

Example 5: Add. $\quad 3 \frac{1}{6}+1 \frac{3}{4}$

Example 6: Subtract. $5 \frac{1}{4}-3 \frac{2}{3}$

Example 7: Multiply.
a. $\frac{3}{7} \cdot \frac{5}{6}$
b. $2 \frac{4}{5} \cdot-1 \frac{2}{3}$

To divide by a fraction we must use the multiplicative inverse. In other words, change the division to multiplying by the $\qquad$ _.

Example 8: Divide.
a. $\frac{4}{5} \div \frac{3}{7}$
b. $-4 \frac{2}{3} \div-7 \frac{3}{5}$

