

DEVELOPMENTAL I REVIEW A

"YOUR FUTURE STARTED YESTERDAY"

1.2 PRIME FACTORIZATION

When I see the word factor, I am thinking to myself:

Ex. Factor: $36 =$ $36 =$ $36 =$ $36 =$

A number that can only be factored into the number 1 and itself is a _____ number

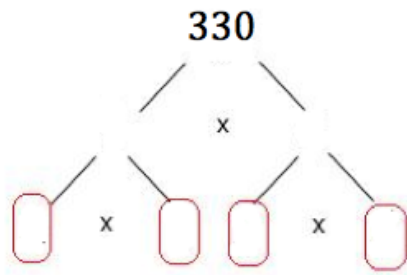
Ex. A prime number:

If it is not a prime number, than it is a _____ number

Prime numbers can only be factored _____ way

Composite numbers can be factored into _____ way

Factoring a composite number where there are only prime numbers is called



Prime factorization of 330 is: _____ x _____ x _____ x _____ = 330

1.2 FRACTIONS

$$\frac{3}{5} \leftarrow \begin{array}{l} \text{_____} \\ \text{_____} \end{array}$$

Dividing with zero:

$$\frac{\quad}{0} = \text{_____} \quad \frac{0}{\quad} = \text{_____}$$

Simplify fractions using

or _____

Ex. Simplify:

$$\frac{24}{40} = \quad \quad \quad \frac{10}{100} =$$

A fraction is _____

or is in _____

if you cannot divide the numerator and denominator any further.

A fraction where the denominator is greater than the numerator is called a

A fraction where the numerator is greater than the denominator is called an

A fraction with a whole number and a fraction is called a

_____.

Converting:

Mixed \rightarrow Improper:

Multiply the _____ by the _____, and then add to the _____.

** Do not answer as mixed number unless asked **

Ex. Convert to an improper fraction:

$$3 \frac{1}{4} =$$

$$1 \frac{5}{6} =$$

Converting:

Improper \rightarrow Mixed:

Divide the _____ into the _____ . The quotient is the _____, the _____ is the numerator, and the divisor is the _____.

** Never convert to a mixed number unless asked **

Ex. Convert to a mixed number:

$$\frac{11}{4} =$$

$$\frac{35}{6} =$$

$$\frac{12}{3} =$$

1.2 MULTIPLYING AND DIVIDING FRACTIONS

When multiplying fractions, just multiply

Top to _____, bottom to _____.

Before you multiply always _____ first.

Simplify _____ & _____.

Never _____.

Ex. Multiply

$$\frac{11}{4} \cdot \frac{3}{2} =$$

$$\frac{35}{6} \cdot \frac{18}{7} =$$

Dividing Fractions

Multiply by the _____.

Think of reciprocal as _____ the number.

Tricks to remember:

S _____

K _____ it

C _____

C _____ it

F _____

F _____ it

Applying the rule makes it a _____ problem.

Ex. Divide:

$$2\frac{9}{10} \div 3\frac{4}{5} =$$

$$4 \div \frac{4}{10} =$$

When dividing or multiplying with fractions, first make sure everything is a _____.

If it is not a fraction, put it over the number _____.

Exponents and Fraction

When there is an exponent, just _____

the exponent to the _____

and the _____.

Ex. Simplify

$$\left[\frac{4}{5}\right]^2 =$$

$$\left[\frac{21}{49}\right]^2 =$$

1.2 ADDING AND SUBTRACTING FRACTIONS: LCD

In order to add or subtract fractions, they must have the same

_____.

Only add and subtract the _____.

You do not do anything to the _____.

Ex. Simplify

$$\frac{2}{4} + \frac{3}{4} =$$

$$\frac{6}{10} - \frac{5}{10} =$$

To add or subtract fractions with _____ denominators,

find the _____ first. LCD means the

_____.

Find the LCD: find the prime factorization of both denominators. List the prime factors, and count how many times each factor occurs. Multiply each prime factor the greatest number of times you counted in any one factorization.

Ex. Find the LCD

3 and 36

10 and 12

Once you find the LCD for the denominators, change the denominators into the LCD with _____.
Whatever you do to the _____, make sure you do to the _____ as well.

Ex. Simplify

$$\frac{4}{9} + \frac{5}{21} =$$

$$3\frac{3}{8} - 1\frac{3}{20} =$$

Fraction to Decimal

Convert fractions to decimals using _____.

The _____ divides into the _____.

Ex. Round to 3 decimal places

$$\frac{7}{2} =$$

$$\frac{46}{9} =$$

Rewrite to above fractions into long division problems below



Homework Checklist

- Section 1.2 Fraction Review*