

September 8, 2015
 * Quiz #4 - Tomorrow
 Solving Equations
 w/ Tools

Sep 8-9:10 AM

1.4 Prime Factorization
 $15 = 3 \cdot 5 \cdot 1$
 Product Factors of 15
 * What is a Prime Number?
 Def. A number that can only be divided by "one" and "itself".
 eg. $7 = 1 \cdot 7$
 Factors of 7
 $P = \{2, 3, 5, 7, 11, 13, 17, 19, \dots\}$
 * Not every odd number is prime!
 i.e. $27 = 3 \cdot 3 \cdot 3 = 3 \cdot 3 \cdot 3$

Sep 8-9:14 AM

Either a number is Prime or it is not \rightarrow Composite
 Composite of Primes
 Factor Tree
 $96 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 2 \cdot 3$
 Product of Primes or factors
 Exponent
 Base
 $96 = 2^5 \cdot 3$

Sep 8-9:24 AM

$464 = 2^4 \cdot 29$
 Factor tree diagram showing 464 divided by 2 four times to reach 29.

Sep 8-9:31 AM

1.5 Order of Operations
 #1 Simplify Grouping Symbols $(), [], \{ \}, |a|, \sqrt{a}$
 $\frac{a}{b} \rightarrow \frac{5}{2} = 2$
 #2 Evaluate Exponents
 $2^3 = 2 \cdot 2 \cdot 2 = 4 \cdot 2 = 8$
 #3 Multiplication & Division which ever comes first working from left to right.
 #4 Addition & Subtraction which ever comes first
 $2 \rightarrow 7$

Sep 8-9:38 AM

$-0(\square\square) \neq -0\square - 0\square$
 $= -0\square\square$

Sep 8-9:50 AM