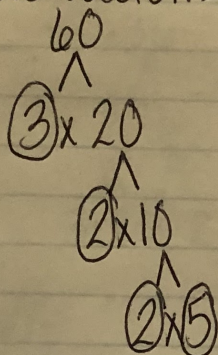


Lesson 3-2 Notes

• Example 1 Prime Factorization of a Number p124 "Factor Trees"

Find the prime factorization of 60.



* All circled #'s are prime factors.

So, the prime factorization of 60 is $3 \times 2 \times 2 \times 5$.

• Example 2 Find the Greatest Common Factor (GCF) p125 of Two Numbers

* GCF is the greatest number that is a factor of two or more numbers.

Find the GCF of 14 and 36.

$$\begin{array}{c}
 14 \\
 \wedge \\
 7 \times 2
 \end{array}$$

$$\begin{array}{c}
 36 \\
 \wedge \\
 9 \times 4 \\
 \wedge \quad \wedge \\
 3 \times 3 \times 2 \times 2
 \end{array}$$

(1st) Factor trees
(2nd) Identify common factors & multiply, if possible.

$$\begin{array}{c}
 14 = 7 \times \textcircled{2} \\
 36 = 2 \times \textcircled{2} \times 3 \times 3 \\
 \downarrow \\
 \underline{2} \\
 \text{GCF}
 \end{array}$$