8-1 notes

Define:

1. Prime number
2. Composite number
3. Prime factorization
4. Factored form
5. Greatest common factor (GCF)

Factor:

Method one:

90 =2 \* 45

=2 \* 3 \* 15

= 2 \* 3 \* 3 \* 5

Method 2: Factor tree

90

 9 10

3 3 2 5

Example 1:

Factor $-12a^{2}b^{3}$

Example 2:

Factor $38rs^{2}t$

Example 3:

Factor $-66pq^{2}$

Greatest common factor:

48 = 2\*2\*2\*2\*3

60 = 2\*2\*3\*5

GCF = 2\*2\*3 = 12

Example 1

Find the GCF of 15 and 16

Example 2:

Find the GCF of $36x^{2}y and 54xy^{2}z$