GCF/LCM Review Name: Key

- Review your divisibility rules for 2, 3, 4, 5, 6, 9, and 10.
- Be able to determine whether a number is prime or composite (remember that 0 and 1 are neither).
- Be able to list factors for numbers.
- Review factor trees and the ladder method for prime factorization.
- Be able to find the GCF and LCM of a set of 2 or more numbers.

***Divisibility**

Tell whether each number is divisible by 2, 3, 4, 5, 6, 9, and 10.

1. 836 — 2, 4
2. 670 — 2, 5, 10
3. 312 — 2, 3, 4, 6

Tell whether each number is prime or composite.

4. 36 – C
5. 111 – C
6. 53 – P

***Factors and Prime Factorization**

List all the factors of each number.

7. 36 — (1, 2, 3, 4, 6, 9, 12, 18, 36)
8. 72 — (1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72)
9. 53 — (1, 53)

Write the prime factorization of each number.

10. 675 — $3^3 \cdot 5^2$
11. 90 — $2 \cdot 3^2 \cdot 5$
12. 112 — $2^4 \cdot 7$

***Greatest Common Factor - Find the GCF of each set of numbers**

13. 49 and 70 — 7
14. 72 and 60 — 12
15. 18, 24, and 48 — 6

***Least Common Multiple - Find the LCM of each set of numbers**

16. 18 and 24 — 12
17. 15 and 20 — 60
18. 4, 12, 15 — 60

GCF/LCM Review Name: Key

***Word Problems.**

19) Maggie and her sister are at a carnival. They separate from each other at the Ferris wheel at 2:00 pm, and they agree that they will each meet back at the Ferris wheel from time to time to see whether the other is ready to leave. Maggie checks back every 6 minutes and her sister, Susie, checks in every 8 minutes. At what time will they meet at the Ferris wheel again?

2:24 pm

20) To win a game show, Theo must find an odd prime factor of 56. How many odd prime factors of 56 are there? Name the odd prime factors.

1 56
2 28
4 14
7 8

1 → 7

21) Jason is trying to make picnic lunches. He has 16 sandwiches, 24 oranges, and 32 pieces of candy. How many lunches can he make if he wants each lunch to have the same number of each kind of food and use all of the food?

GCF 8 lunches

22) Diane canned 18 quarts of peaches, 15 quarts of apricots, and 12 quarts of plums. She would like to place the quarts into the greatest number of boxes so that each box has the same number of quarts of each kind of fruit. How many boxes does she need?

GCF 3 boxes