

AA 4.2 TI #4,8

Accuracy	Total
Chart	4
a) 4	4
b) 4	4

4. *Math Concepts:* For each of the given number pairs (A, B) , determine the $GCF(A, B)$ and the $LCM(A, B)$. Then record the prime factorizations of $A, B, GCF(A, B)$, and $LCM(A, B)$ as demonstrated here:

(A, B)	$GCF(A, B)$	$LCM(A, B)$	Prime Factorizations			
			A	B	$GCF(A, B)$	$LCM(A, B)$
(8, 12)	4	24	$2 \times 2 \times 2$	$2 \times 2 \times 3$	2×2	$2 \times 2 \times 2 \times 3$
(20, 24)						
(12, 25)						
(15, 60)						

- a. Find the relationship between the prime factors of each of the two numbers and the prime factors of the GCF of the two numbers. Explain how you can determine the GCF of two numbers by using the prime factorizations of both numbers.
- b. Find a relationship between the prime factors of each of the two numbers and the prime factors of the LCM of the two numbers. Explain how you can determine the LCM of two numbers by using the prime factorizations of both numbers.

A 4.2 TI #8

Understanding	Accuracy	Communication	Presentation	Total
2	2	2	2	8

8. *Math Concepts:* In this activity set we explored the relationship between the greatest common factor and the least common multiple of two numbers. Does this relationship hold if you are considering the greatest common factor or the least common multiple of three numbers? Experiment with several sets of three numbers. Explain your thinking.