

Number Theory

1. List 3 multiples of each of the following number:

5 _____	8 _____
12 _____	37 _____
14 _____	51 _____

2. List all of the factors of each number.

24	15	80	40
56	62	32	50
39	58	48	72

3. Classify each number as prime or composite:

27	19	83	66
2	63	38	59
39	35	41	94

4. Complete each divisibility table. Write yes if the number is divisible by the given number. Write no if it is not divisible by the given number.

6,81	480	507	1,780
by 3 _____	by 2 _____	by 2 _____	by 6 _____
by 4 _____	by 6 _____	by 3 _____	by 7 _____
by 6 _____	by 7 _____	by 4 _____	by 8 _____
by 8 _____	by 8 _____	by 6 _____	by 10 _____
by 10 _____	by 10 _____	by 10 _____	by 12 _____

5. Find the least common multiple.

8 and 12	3 and 4	6, 8, and 12
15 and 20	16 and 20	6 and 18
4, 12, and 16	5 and 11	2, 6, and 9

6. Find the greatest common factor of each set of numbers.

14 and 72	42 and 36	63, 18, and 72
30 and 70	60 and 12	20, 40, and 72
44 and 36	42 and 28	64 and 96

- 7. Serena wants to create snack bags for a trip she is going on. She has 6 granola bars and 10 pieces of dried fruit. If the snack bags should be identical without any food left over, what is the greatest number of snack bags Serena can make?**
- 8. Matthew goes hiking every 12 days and swimming every 6 days. He did both kinds of exercise today. How many days from now will he go both hiking and swimming again?**