Week 5

Lesson 1

Factors are numbers that will divide into a number evenly without a remainder.

1. **Factors** come in pairs. A **pair of factors** are two numbers which equal a certain number when multiplied.

   12 **1 × 12** **2 × 6** **3 × 4**

2. **Factors** are arranged in numerical order.

   12 **1, 2, 3, 4, 6, 12**

3. A **common factor** is a **factor** that two or more numbers share.

Number	Pairs of Factors	Factors	Common Factors
32	1 × 32	1, 2, 4, 8, 16, 32	
	2 × 16		
	4 × 8		1, 2, 4
20	1 × 20	1, 2, 4, 5, 10, 20	
	2 × 10		
	4 × 5		

4. The **greatest common factor (gcf)** is the largest **factor** two or more numbers share.

Numbers	Factors	gcf
15	**1, 3, 5, 15**	
25	**1, 5, 25**	**5**

Write the pairs of factors for each number.

1. 24 _____

2. 36 _____

3. 10 _____ 8 _____

4. 2 _____ 6 _____

Write the factors for each number. Remember they must be in numerical order.

5. 18 _____ 12 _____

6. 22 _____ 16 _____

7. 7 _____ 9 _____

8. **Factor to find the gcf.**

Numbers	Pairs of Factors	Factors	Common Factors	gcf
22				
18				
4				
12				
35				
40				
28				
14				
18				
36				

Add or subtract the measures.

9.

4 yr. 269 da.	5 bu. 1 pk.	5 hr. 25 min.
+7 yr. 102 da.	−1 bu. 3 pk.	−3 hr. 50 min.

Convert the metric measures.

10. 7 kL = _____ hL 28,000 g = _____ dg 45 dam = _____ cg

Find the answers and check.

11.

73,000	6,837	80	45,821	7,534
−29,472	+4,123	−31	13,276	+2,448
			+35,470	

Lesson 2

Prime numbers have only two factors; 1 and the number itself.

2 is prime because its only factors are 1 and 2.
3 is prime because its only factors are 1 and 3.

Composite numbers have other factors besides 1 and the number.

4 is composite because its factors are 1, 2, and 4.
10 is composite because its factors are 1, 2, 5, and 10.

The **prime numbers** from 1 to 20 are: **2, 3, 5, 7, 11, 13, 17,** and **19**.

Find all of the prime numbers from 1 - 100 by using Eratosthenes Sieve.

1. Cross out **1** because it is neither **prime** nor **composite**.
2. Cross out all even numbers except **2**.
3. Cross out all numbers with **3** as a factor except **3**.
4. Cross out all numbers with **5** as a factor except **5**.
5. Cross out all numbers with **7** as a factor except **7**.
6. Circle all the remaining numbers. They are **prime numbers**.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Write the prime numbers from 1 - 20.

7. _____

Write prime or composite beside each number.

8.	56 _____		23 _____		18 _____
9.	37 _____		20 _____		63 _____
10.	11 _____		69 _____		44 _____
11.	45 _____		31 _____		12 _____
12.	73 _____		89 _____		19 _____

13. **Factor to find the gcf.**

Numbers	Pairs of Factors	Factors	Common Factors	gcf
28				
49				
16				
24				

Convert the measures.

14. 4 dag = _____ mg 10 ft. = _____ in. 2 km = _____ hm

Round off the numbers.

Number	Nearest Thousand	Nearest Ten Thousand	Nearest Hundred Thousand
15. 863,290			
16. 139,571			
17. 478,999			

Solve the word problems.

18. Jerrica spent 2 hours and 15 minutes working in the yard on Saturday, Rosie spent 1 hour and 25 minutes, and Trina spent 3 hours and 35 minutes. How much time was spent in all? _____

19. For a party we use two punch bowls. One bowl holds 2 gallons and 1 quart and the other holds 3 gallons and 3 quarts of punch. How much punch is needed to fill both bowls?

_____

Write the Arabic numerals.

20. $\overline{D}$ _____ MCMXLII _____ DCV _____

