Chapter 3 – Arithmetic

1.   Show $3 + 4 = 7$ using pictures.
2.   Show $6 - 1 = 5$ using pictures.
3.   Show $3 \times 4 = 12$ using pictures.
4.   Show $10 \div 2 = 5$ using pictures.
5.   Show $2 + 6 = 8$ using pictures.
6.   Show $3 - 1 = 2$ using pictures.
7.   Show $6 \times 2 = 12$ using pictures.
8.   Show $12 \div 3 = 4$ using pictures.
9.   Label the number that each arrow is pointing to.

```
   3  ←                  17  ←
+  9  ←               –   7  ←
  12  ←                  10  ←


   6  ←           18  ÷   3   =   6
 × 4  ←
  24  ←            ↑      ↑       ↑
```

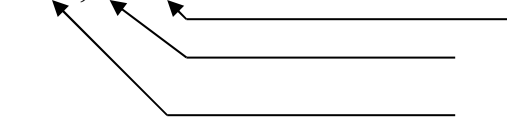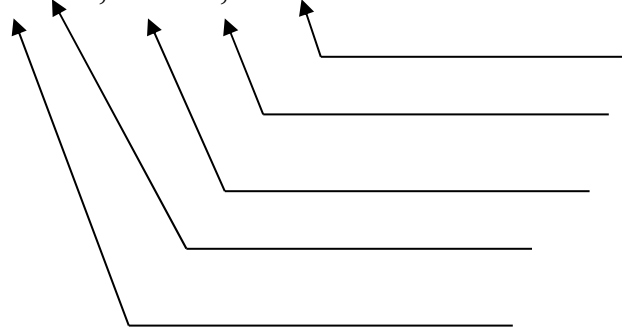## Chapter 4 – Place Value

Write the number out in words, the way you would say it.

1.   921,438
2.   243,199,203
3.   506,111,242,000
4.   718,640,700,802,411
5.   990,400,628,455,817,224

Label the periods.

6.   321,452,300
7.   421,407,852,311,794,612

Label the place values shown.

8.   1 2 4, 3 8 5

9.   3 2 8, 4 7 2, 1 0 5

Chapter 6 – Exponents

Write as a multiplication problem.

1. 4^3
2. 8^2
3. 16^3
4. 6^2
5. 7^5
6. 2^6

Write as an exponent.

7. $2\times2\times2\times2$
8. 3×3
9. $8\times8\times8\times8\times8\times8$
10. $10\times10\times10$
11. $6\times6\times6\times6$
12. 5×5

Solve.

13. 2^2
14. 5^2
15. 3^3
16. 2^5
17. 4^3
18. 2^6
19. 3^4
20. 10^2
21. 10^4
22. 7^2

Chapter 7 – Word Problems

Solve.

1.   Ten shared equally with 5 people is _____.
2.   Eight plus three is _____.
3.   Ten minus seven equals _____.
4.   5 apples added to 6 apples is _____apples.
5.   Eight chess pieces together with eight chess pieces is _____ total chess pieces.
6.   The difference of 8 and 6 is _____.
7.   The quotient of six and two equals _____.
8.   The sum of three and 7 is _____.
9.   4 tables decreased by one table is _____ tables.
10.   3 feet shorter than 8 feet is _____feet.
11.   Ten times two equals _____.
12.   Six fewer than twelve is _____.
13.   One longer than two is _____.
14.   15 divided by 3 equals _____.
15.   The product of two and nine is _____.

Chapter 8 – Factoring and Multiples

List all possible factors.

1.   40
2.   18
3.   27
4.   16
5.   28
6.   42

Find the GCF.

7.   15, 75
8.   8, 12
9.   20, 100
10.   14, 49
11.   10, 25
12.   27, 36

Find the LCM

13.   15, 75
14.   8, 12
15.   4, 16
16.   21, 14
17.   3, 7
18.   8, 36

Chapter 9 – Divisibility Rules

Check for divisibility of the following numbers. Put a checkmark in any column that applies.

Number	Divisible by 2?	Divisible by 3?	Divisible by 5?	Divisible by 10?
36				
47				
300				
95				
111				
31,000				
78				
321				
405				
611				
88				
87				
85				
340				
6502				
4305				
7000				
9000				

Chapter 10 – Prime Factorization

Use a factor tree and divisibility rules to find the prime factorization.

1. 28
2. 20
3. 54
4. 60
5. 85
6. 100
7. 225
8. 800
9. 99
10. 84
11. 162
12. 550