

(Help from Learning Center is acceptable.)

All work must be shown (legibly) and done in pencil for full credit.

1. (4 points) Write the following numbers in standard form

2. (4 points) Write the place value for the digit indicated in

(a) twenty-one thousand, two hundred

98,765,014

1
0
5
8

(b) two billion, five hundred thousand, four hundred seven

3. (4 points) Find the sum of 9,258 and 16,375.  
Complete the grid provided to show your work.

4. (4 points) Find the difference of 35,276 and 26,999.  
Complete the grid provided to show your work.

1	6	3	7	5
+				
<hr/>				

	3	5	2	7	6
-					
<hr/>					

5. (4 points)

(a) Round to the nearest ten

768,752

(b) Round to the nearest thousand

768,752

6. (4 points)

(a) Round to the nearest hundred billion

749,342,001,913,210

(b) Round to the nearest trillion

839,542,001,913,210

7. (4 points)

Find the product of 12,436 and 9.

Complete the grid provided to show your work.

1	2	4	3	6
×				
<hr/>				

8. (4 points)

Find the product of 59 and 53.

Complete the grid provided to show your work.

		5	3
	×		
<hr/>			
<hr/>			

**9.** (4 points)

Find the quotient of 5427 and 67.

$$67 \overline{)5427}$$

**10.** (4 points)

Find the quotient of 2518 and 67.

*You may use remainder notation.*

$$67 \overline{)2518}$$

**11.** (4 points)

(a) Write the following expression in exponential notation.

$$y \cdot y \cdot y \cdot y \cdot y \cdot y \cdot y \cdot y$$

**12.** (4 points)

(a) Simplify the following expression

$$8 + 7(10 - 2 \cdot 3)$$

(b) Write the following expression in expanded form. Then find the value of the expression.

$$6^4$$

(b) Simplify the following expression

$$(1 + 6)(8 - 5)^2$$

**13.** (4 points) Evaluate each given expression.

(a)  $9x - 15$  when  $x = 8$

(b)  $w^2 + 3w$  when  $w = 9$

**15.** (4 points) Solve each equation using the subtraction property of equality.

(a)  $c + 8 = 23$

(b)  $m + 53 = 738$

**14.** (4 points) Simplify each expression by combining like terms.

(a)  $19y + 5y + y$

(b)  $x^2 + 8x + 9x^2 + 2x^2 + x$

**16.** (4 points) Solve each equation using the addition property of equality.

(a)  $k - 12 = 18$

(b)  $x - 42 = 254$

**17.** (4 points) Use divisibility tests to determine if 96 is divisible by

	Yes/No
2	
3	
5	
6	
10	

**18.** (4 points) Use divisibility tests to determine if 625 is divisible by

	Yes/No
2	
3	
5	
6	
10	

**19.** (4 points) Find the prime factorization of

(a)

14

(b)

98

**20.** (4 points) Find each least common multiple

(a)

LCM (16, 20) =

(b)

LCM (18, 40) =



