

# Unit Two Math Study Guide

(revised 2011)

Name: \_\_\_\_\_

**Part A.** Solve the following three problems using the partial-sums addition method.

1).  **$643 + 783$**

2).  **$34.6 + 208.7$**

3).  **$47.6 + 65.5$**

Solve the following three problems using the trade-first subtraction method.

4).  **$581 - 456$**

5).  **$243.2 - 52.8$**

6).  **$19.3 - 12.61$**

7). Mrs. Seier visited Miss Bradshaw over the summer in her home country of Tasmania. She wanted to travel from Launceston in the north to Miss Bradshaw's summer home of Burnie in the northwest. To make sure she didn't get lost, Mrs. Seier took out her trusty road map. The map key said 1 inch = 500 miles. She measured  $2\frac{1}{2}$  inches. How many miles did Mrs. Seier travel to get from Launceston to Burnie?

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8). Ms. Slater locked her keys in her car last Friday at school. Too embarrassed to ask her fiancé to come and get her, Ms Slater walked across the fields (as a crow flies) to her house. Lucky for Ms. Slater, it was only a grand total of 1,800 feet. When she saw her neighbor, Mr. Miller, she said, "Hey, Dude, I just walked \_\_\_\_\_ inches from Pleasant View to my house! My legs are killing me!" Mr. Miller replied, "Hmmm...that's not really very far, Ms. Slater. It's really only \_\_\_\_\_ yards."

9). Write the number that has

5 in the ones place,  
3 in the thousands place,  
6 in the ten-thousands place,  
8 in the hundreds place,  
4 in the tenths place,  
and 7 in all of the remaining places. \_\_\_\_\_, \_\_\_\_\_.

Identify the errors in the following problems.

10). 
$$\begin{array}{r} 39 \\ \times 43 \\ \hline 12000 \\ 36 \\ 900 \\ + 270 \\ \hline 13,206 \end{array}$$

11).

12). Why is making a quick estimate or magnitude estimate of a problem helpful before solving it?

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For each problem, make a magnitude estimate. Circle the number. Then solve the problem showing your work.

13).  $53 * 72 =$  \_\_\_\_\_

10s    100s    1,000s    10,000s

14).  $4 * 308 =$  \_\_\_\_\_

10s    100s    1,000s    10,000s

15).  $13.5 * 2.65 =$  \_\_\_\_\_

10s    100s    1,000s    10,000s

16).  $35 * 14.2 =$  \_\_\_\_\_

10s    100s    1,000s    10,000s

Fill in the blank with the phrase from the word bank that describes the chance the event will happen.

certain    very likely    likely    50-50 chance    unlikely    very unlikely    impossible

17). A. A 90% chance of snow. \_\_\_\_\_

B. Expectant parents wondering if they will get a boy or girl. \_\_\_\_\_

C. Having T-bone steak for hot lunch at Pleasant View. \_\_\_\_\_

D. A  $\frac{1}{4}$  chance of Barry Bonds hitting a homerun in tonight's game. \_\_\_\_\_

E. Landing on green on a spinner that has 33  $\frac{1}{3}\%$  each of blue, green, and red. \_\_\_\_\_

**Part B.** Write the following in expanded notation.

18). 64 \_\_\_\_\_

19). 138.5 \_\_\_\_\_

20). Miss Bradshaw's grandfather, Bert Bradshaw, was a coal miner. He began working in Birmingham, AL in 1915. Grandpa Coleman only missed 1 day on the job because of being sick during the entire time he worked there. He retired in 1943. How many years did he work for the Birmingham Coal Mining Company before retiring to a small farm in Wilton, IA?

a. List the numbers needed to solve the problem. \_\_\_\_\_

b. Describe what you want to find. \_\_\_\_\_

c. Open sentence \_\_\_\_\_

d. Solution: \_\_\_\_\_ Answer: \_\_\_\_\_

21). Mrs. Seier had the following scores in bowling at Millertime Lanes: **88, 94, 104, 108, 72, 106, 99, 104, 102**. Okay...so Mrs. Seier is not as good as Mr. Wilson, but at least she tries.

a. the maximum \_\_\_\_\_ b. the minimum \_\_\_\_\_

c. the range \_\_\_\_\_ d. the mode \_\_\_\_\_ e. the median \_\_\_\_\_

22). 5S and 5B raised money for a La-Z-Boy recliner to be placed in Mr. Dehner's office. The 23 students in 5S each raised \$8. (Those knuckle draggers!) The 26 students in 5B each raised 3.5 times as much as each student in 5S.

A. How much money was raised altogether in both classrooms? **Show your work and explain your answer!**

B. Because they raised so much money, one La-Z-Boy was purchased for Mr. Cotton, and another model (which cost twice as much) was bought for Mrs. Whigham. How expensive was each La-Z-Boy? Show your work and explain your answer. You may use the back of this sheet.