

Name Answer Key

Study Guide Unit 1: Addition & Subtraction Using Place Value

Test on: Thursday, October 14th

For numbers 1-5, write the definition for each vocabulary word.

1. Addition: finding the total by combining 2 or more numbers
2. Subtraction: taking 1 number away from another
3. Rounding: to find the nearest ten or hundred
4. Difference: the answer to a subtraction problem
5. Sum: the answer to an addition problem

6. Round the following numbers to the nearest ten using any strategy.

54

42

59

328

60

40

60

330

7. Round the following numbers to the nearest hundred using any strategy.

88

299

431

787

100

300

400

800

8. The Vallan family need to bring enough money for a new T.V. that costs \$349.

a) Round \$349 to the nearest ten

b) Round \$349 to the nearest hundred.

\$349- \$ 350

\$349- \$ 300

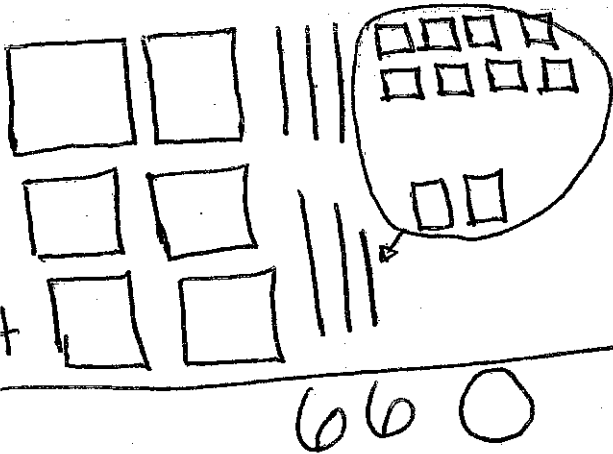
c) Should you round to the nearest ten or hundred in order to have enough money for the T.V.? Explain your thinking.

You should round to the nearest 10, because you will get change back. Rounding to the nearest 100 will not be enough money.

9. Miss Arini had her class solve $238 + 422$. Jerome solved the problem two different ways. Show and explain two different strategies that Jerome could have used to solve the problem.

$$238 + 422 = 660$$

Show & Explain One Way:



First, I made 238 with

place value blocks. Then, I

made 422 with place value

blocks. $8 + 2$ makes a new 10 stick. Finally, I added all my place value blocks and got 660.

Show & Explain Another Way:

$$\begin{array}{r} 238 \\ + 422 \\ \hline 660 \end{array}$$

First, I turned the problem

into algorithm. Then, I

added the ones and put

the extra 10 stick up top. After that, I added the tens and hundreds. In the end, I got 660.

10. Ms. Umbarger had 17 magazines and 29 comic books on her bookshelf. How many books does she have on the bookshelf? Show and explain your strategy.

$$\begin{array}{r} 1 \\ 17 \\ + 29 \\ \hline 46 \end{array} \text{ books}$$

First, I turned my addends into algorithm. Next, I added the ones and got 16. I carried the 1 up top. After that, I added the tens and got 4. In the end, I got 46 as my answer.

11. Solve the following problems using any strategy.

a. $4 + 6 + 8 = \underline{18}$

$$\begin{array}{r} \checkmark \\ 10 \\ 10 + 8 = 18 \end{array}$$

b. $3 + 4 + 7 = \underline{14}$

$$\begin{array}{r} \checkmark \\ 10 + 4 = 14 \end{array}$$

c. $24 + 32 = \underline{56}$

$$\begin{array}{r} 24 \\ + 32 \\ \hline 56 \end{array}$$

d. $53 + 19 = \underline{72}$

$$\begin{array}{r} 1 \\ 53 \\ + 19 \\ \hline 72 \end{array}$$

e. $217 + 226 = \underline{443}$

$$\begin{array}{r} 1 \\ 217 \\ + 226 \\ \hline 443 \end{array}$$

f. $548 + 321 = \underline{869}$

$$\begin{array}{r} 548 \\ + 321 \\ \hline 869 \end{array}$$

12. Mrs. Figurski had 52 ROAR cards. She gave 18 ROAR cards to Mrs. Johnson's class. Then, she gave 21 ROAR cards to Ms. Vallan's class. She put the rest into a box. How many ROAR cards are in the box?

Estimate about how many stickers are in the box?

$$\begin{array}{l} \textcircled{52} = 50 \\ \textcircled{18} = 20 \\ \textcircled{21} = 20 \end{array}$$

$$\begin{array}{r} 50 \\ -20 \\ \hline 30 \\ -20 \\ \hline 10 \end{array}$$

What is the actual answer?

$$\begin{array}{r} 4 \text{ } 12 \\ \cancel{52} \\ -18 \\ \hline 34 \end{array}$$

$$\begin{array}{r} 34 \\ -21 \\ \hline 13 \text{ roar cards} \end{array}$$

13. Solve the following problems using any strategy.

b. $47 - 23 = \underline{24}$

$$\begin{array}{r} 47 \\ -23 \\ \hline 24 \end{array}$$

b. $435 - 228 = \underline{207}$

$$\begin{array}{r} 2 \text{ } 15 \\ \cancel{435} \\ -228 \\ \hline 207 \end{array}$$

c. $\begin{array}{r} 3 \text{ } 16 \\ \cancel{48} \\ -28 \\ \hline 18 \end{array}$

d. $\begin{array}{r} 4 \text{ } 18 \\ \cancel{58} \\ -239 \\ \hline 319 \end{array}$

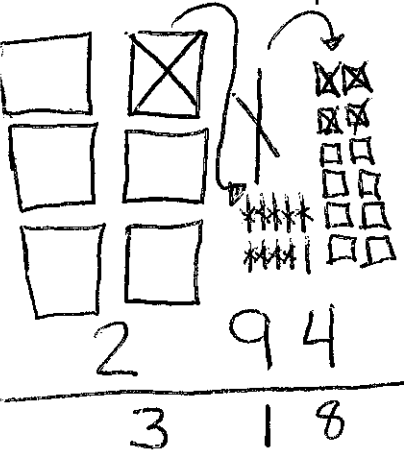
e. $\begin{array}{r} 6 \text{ } 16 \\ \cancel{76} \\ -49 \\ \hline 27 \end{array}$

f. $\begin{array}{r} 4 \text{ } 11 \\ \cancel{78} \\ -444 \\ \hline 307 \end{array}$

14. Ms. Snyder had her class solve $612 - 294$. Jerome solved the problem two different ways. Estimate your answer. Show and explain two different strategies that Jerome could have used to solve the problem.

$$612 - 294 = \underline{318}$$

a. Show & Explain One Way:



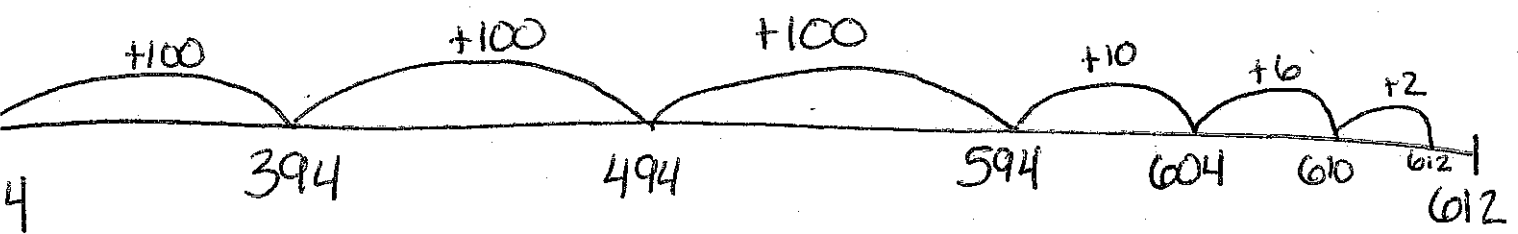
First, I made 612 into place value blocks and wrote 294 under it. Next, I couldn't do $2 - 4$, so I borrow from the tens and it made 12 ones. I subtracted $12 - 4 = 8$. After that, I couldn't subtract $0 - 9$, so I borrowed from the hundreds. Then, I subtracted $10 - 9 = 1$. After that, I subtracted $5 - 2 = 3$. In the end, I got 318 as my answer.

Show & Explain Another Way:

$$\begin{array}{r} 512 \\ \cancel{6}12 \\ -294 \\ \hline 318 \end{array}$$

First, I turned the problem into algorithm. I couldn't subtract $2 - 4$, so I borrowed a ten stick to make 2 into 12. $12 - 4 = 8$. I couldn't subtract $0 - 9$, so I borrowed a tens stick from the hundreds and 0 became 10. $10 - 9 = 1$. Next, I subtracted the hundreds $5 - 2 = 3$. In the end, I got 318 as my answer.

612 - 294



$$100 + 100 + 100 + 10 + 6 + 2 = 318$$