Name _____ Date _____

Number Lines and Number Sentences

Self-Check

Use the questions in the table to select practice with writing partitions of numbers and adding and subtracting using number lines.

- Look at each row in the table.
- For each row, decide whether you are "Working On It," you are "Getting It," or you already "Got It."
- Remember, you may feel you are "Working On It" for one row, but for another row, you already "Got It."
- On this table, draw a circle around each set of problems you decide to do.
- If one set of problems seems too easy or too hard, choose a different set from the same row.

Practice Menu			
Can I Do This?	**▲ Working On It!** 	**● Getting It!** 	**■ Got It!** 
Show that different ways of writing a number are equal.	**Questions 1–4**	**Questions 3–6**	**Questions 5–7**
Add using number lines.	**Questions 8–9**	**Questions 9–10**	**Questions 10–11**
Subtract using number lines.	**Questions 12–13**	**Questions 13–14**	**Questions 14–15**

Name _____ Date _____

Show Different Partitions Are Equal

Use base-ten pieces and number lines as needed for Questions 1–6.

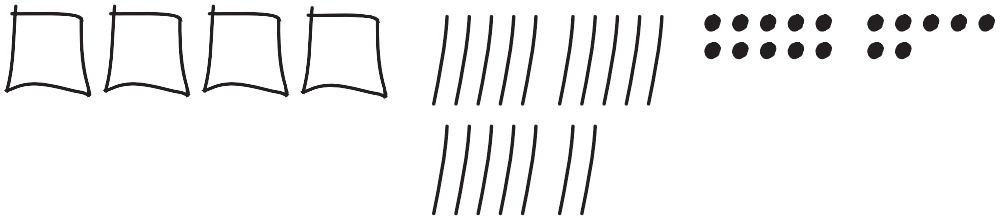
▲□□ **1. A.** Show 261 using base-ten shorthand.

B. Now show 261 another way, still using base-ten shorthand.

C. Write number sentences to match your answers in 1A and 1B.

D. Do either of your answers follow the Fewest Pieces Rule? If so, which one? If neither one does, show 261 with base-ten shorthand following the Fewest Pieces Rule. Write a number sentence to match.

▲□□ **2.** Lee Yah showed a number using base-ten shorthand:



Lee Yah said, "The number sentence that matches is 400 + 17 + 17 = 434. My number is 434."

A. Mrs. Dewey said that Lee Yah made a mistake. What is Lee Yah's mistake?

Name _____ Date _____

B. How much are all the skinnies worth in Lee Yah's shorthand?

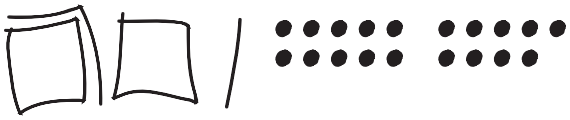
C. How much are all the bits worth? _____

D. What number did Lee Yah really show with her base-ten shorthand?

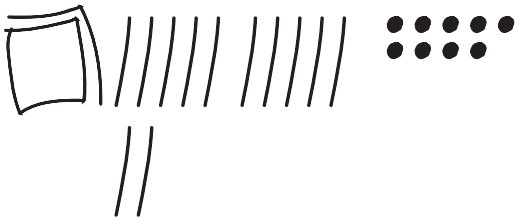
E. Write a correct number sentence to match Lee Yah's base-ten shorthand.

3. Roberto and Jerome both showed 1129 using base-ten shorthand.

Roberto



Jerome



A. If they are both correct, tell how you know. If one is not correct, correct it.

B. Write a number sentence next to each correct picture of 1129.

C. Combine these two number sentences into one true number sentence.

Name _____ Date _____

▲● **4.** **A.** Show 94 using base-ten shorthand.

B. Use this number line to show how a base-ten hopper can get from 0 to 94. Match the hops to the base-ten pieces you drew in Question 4A.

C. Use this number line to show a different way a base-ten hopper can get from 0 to 94. Try to use fewer hops than you used before.

D. Write a number sentence to match the hops in Question 4B.

E. Write a number sentence to match the hops in Question 4C.

●■ **5.** Tell whether each of these number sentences is true or false.

	True	False
A. $783 = 700 + 80 + 3$		
B. $597 = (6 \times 100) - 3$		
C. $(3 \times 100) + 30 + 3 = 133$		
D. $262 = 200 + 60 - 2$		

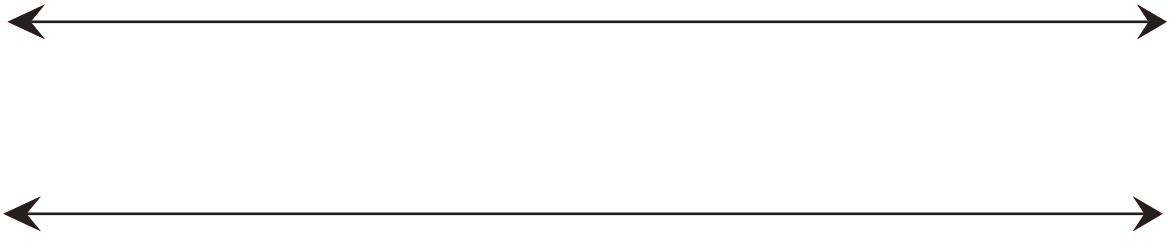
E. Choose one number sentence from Question 5 and use this number line to show that your answer is correct.

Name _____ Date _____

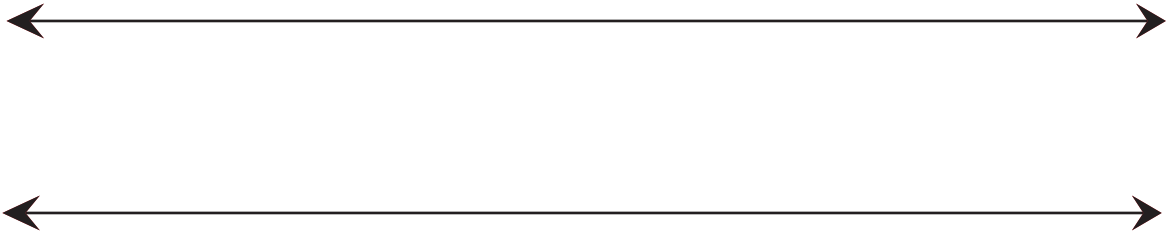
6. Tell whether each of these number sentences is true or false.

	True	False
A. $200 + 40 + 18 = 200 + 60 - 2$		
B. $116 - 16 = 10 \times 10$		
C. $30 + 6 + 500 = 500 + 20 + 26$		
D. $500 + 30 + 5 = 400 + 125$		

E. Choose one number sentence from Question 6 and use these number lines to show that your answer is correct. Use one number line for each side of the equation.



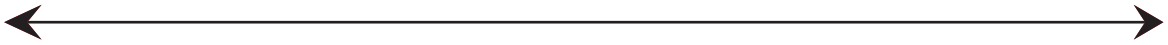
7. Write a true number sentence similar to those in Question 6. Use these number lines to show that the number sentence is true.



Name _____ Date _____

Add Using Number Lines

▲□□ **8.** **A.** Use this number line to show how a base-ten hopper can start at 450 and hop 238 ahead.



B. Where does it land? _____

C. Write an equation (a true number sentence) to match the hops.

_____

D. Complete the number sentence. 450 + 238 = □ .

E. Write another number sentence in the same family.

▲●□ **9.** What number must *n* be to make the number sentence true?

A. 17 + *n* = 30 *n* = _____

B. 100 + *n* + 8 = 138 *n* = _____

C. 200 + 10 + *n* = 225 *n* = _____

D. 379 = *n* + 70 + 9 *n* = _____

E. Choose one number sentence and use this number line to show that your answer is correct.

Name _____ Date _____

10. What number must n be to make the number sentence true?

A. $n + 150 + 6 = 300 + 50 + 6$ $n =$ _____

B. $400 + 160 + 17 = 500 + n + 17$ $n =$ _____

C. $500 + 30 + 4 = 300 + n + 34$ $n =$ _____

D. $150 + n + 13 = 300 + 10 + 3$ $n =$ _____

E. Choose one number sentence and use these number lines to show that your answer is correct. Use one number line for each side of the equation.

11. Write a number sentence similar to those in Question 10. Use these number lines to show that the number sentence is true.

Name _____ Date _____

Subtract Using Number Lines

▲□□ **12. A.** Use this number line to show how a base-ten hopper can start at 500 and end at 165.

B. Write a number sentence to match the hops.

_____

C. Complete the number sentence. 500 – □ = 165.

D. Write another number sentence in the same family.

▲●□ **13. A.** Use this number line to show how a base-ten hopper can start at 362 and hop 398 ahead.

B. Where does it land? _____

C. Write an equation to match the hops. _____

D. Use this number line to show a different way using a different number of hops. If possible, use fewer hops.

E. Complete the number sentence. □ – 398 = 362.

F. Write another number sentence in the same family.

Name _____ Date _____

14. What number must n be to make the number sentence true?

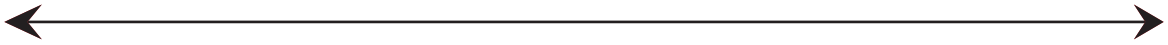
A. $6 + 40 + 300 = 200 + n - 14$ $n =$ _____

B. $800 - 60 - 2 = 700 + n + 8$ $n =$ _____

C. $7 + 170 + n = 400 - 30 + 7$ $n =$ _____

D. $1000 - 93 = 900 + n$ $n =$ _____

E. Choose one problem and use these number lines to show that your answer is correct. Use one number line for each side of the equation.



15. Write a subtraction number sentence similar to those in Question 14. Use these number lines to show that the number sentence is true.