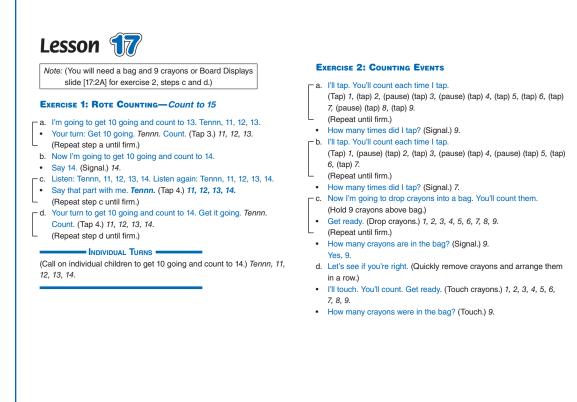
Connecting Math Concepts

COMPREHENSIVE EDITION

A DIRECT INSTRUCTION PROGRAM



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EXERCISE 3: SYMBOL IDENTIFICATION—Introduction of 3 c. (Point to 3.) Here's a new number. This is 3. • What number? (Touch.) 3. a. (Display page and point to top row.) [17:3A] d. (Point to first 3.) Is this 3? (Touch.) Yes. You'll tell me the names for all the things in this row when I touch • What is it? (Touch.) 3. under them. -e. (Point to 5.) Is this 3? (Touch.) No. • (Point to =.) Get ready. (Touch.) Equals. What is it? (Touch.) 5. . • (Point to 5.) Get ready. (Touch.) 5. f. (Repeat step e for the following:) (Repeat for remaining symbols.) 6, box, 7, plus. (Point to ___.) Is this 3? What is it? b. Let's do those again. You'll tell me the name for each thing when I No Plus touch under it. I'll start at this end. 6 No 6 (Point to +.) Get ready. (Touch.) Plus. Yes 3 3 (Repeat for remaining symbols.) 7, box, 6, 5, equals. 4 No 4 (Repeat steps a and b until firm.) (Repeat symbols that were not firm.) 200 Lesson 17 **Connecting Math Concepts**

EXERCISE 4: NEXT NUMBER

- a. I'm going to count, and you're going to tell me the next number.

- Listen: 10, 11, tweeelve. What's the next number? (Signal.) 13.
- Listen: 7, eieieight. What's the next number? (Signal.) 9.
- Listen: 9, 10, elevennn. What's the next number? (Signal.) 12.
- Listen: 8, niiine. What's the next number? (Signal.) 10.
- Listen: 5, siiix. What's the next number? (Signal.) 7.
- Listen: 6, sevennn. What's the next number? (Signal.) 8.
 Listen: 8, 9, tennn. What's the next number? (Signal.) 11.
- (Repeat step a until firm.)
- b. Let's do it again, but this time I'm going to make it even harder.
- Listen: sevennn. What's the next number? (Signal.) 8.
- Listen: 11, tweeelve. What's the next number? (Signal.) 13.
- Listen: niiine. What's the next number? (Signal.) 10.
- Listen: 10, elevennn. What's the next number? (Signal.) 12.
- Listen: eieieight. What's the next number? (Signal.) 9.
- Listen: 9, tennn. What's the next number? (Signal.) 11.
- Listen: filive. What's the next number? (Signal.) 6.
- Listen: fouuur. What's the next number? (Signal.) 5.
- Listen: siiix. What's the next number? (Signal.) 7.
- (Repeat step b until firm.)

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INDIVIDUAL TURNS

(Call on individual children to perform one or two of the following tasks.)

- Listen: 7, eieieight. What's the next number? (Call on a child.) 9.
- Listen: fiiive. What's the next number? (Call on a child.) 6.
- Listen: 9, tennn. What's the next number? (Call on a child.) 11.
- Listen: 11, tweeelve. What's the next number? (Call on a child.) 13.

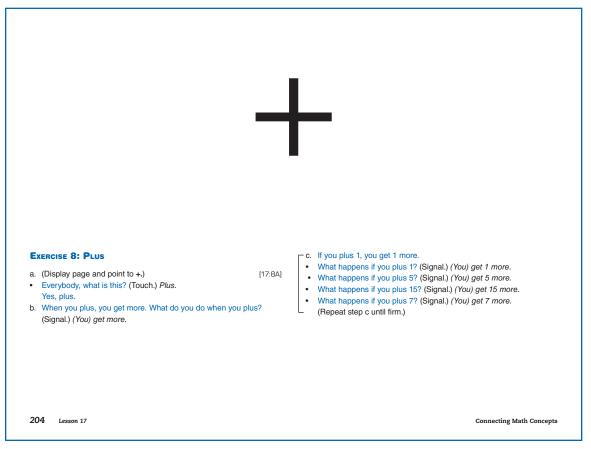
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• Listen: 6, sevennn. What's the next number? (Call on a child.) 8.

EXERCISE 5: LINES FOR NUMERALS g. (Point to first .) What's this? (Touch.) (A) box. Does a box tell how many lines to make? (Touch.) No. - a. A number tells you how many lines to make. h. (Point to next .) What's this? (Touch.) (A) box. What does a number tell you? (Signal.) How many lines to make. • Does a box tell how many lines to make? (Touch.) No. (Repeat step a until firm.) i. (Point to 5.) I'm going to make lines for this number b. If the number is 12, how many lines do you make? (Signal.) 12. How many lines? (Touch.) 5. • If the number is zero, how many lines do you make? (Signal.) Zero. Count the lines and tell me when to stop. Get ready. (Make lines • If the number is 9, how many lines do you make? (Signal.) 9. under 5.) 1, 2, 3, 4, 5, stop. c. Listen: A box is not a number, so it doesn't tell how many lines to (Teacher reference:) [17:5B1_5] make. 5 🗆 🗆 • Is a box a number? (Signal.) No. • Does a box tell how many lines to make? (Signal.) No. d. Is 10 a number? (Signal.) Yes. We made the lines for the number 5. Does 10 tell how many lines to make? (Signal.) Yes. j. (Point to boxes.) What are these? (Touch.) Boxes. How many? (Signal.) 10. • Do they tell how many lines to make? (Touch.) No. e. Is 3 a number? (Signal.) Yes. · So I don't make lines for them. Does 3 tell how many lines to make? (Signal.) Yes. How many? (Signal.) 3. f. (Write on the board:) [17:5A] 5 🗌 🗌 One of these is a number, and some are boxes. If it is a number, you'll tell me what number it is. (Point to 5.) What's this? (Touch.) 5. • Does 5 tell how many lines to make? (Touch.) Yes. • How many? (Touch.) 5. 202 Lesson 17 **Connecting Math Concepts**

EXERCISE 7: COUNTING FROM NUMBERS a. I'm going to get numbers going and say the next number. My turn to get 6 going and say the next number. Siiix. (Signal.) 7. My turn to get 4 going and say the next number. Fouuur. (Signal.) 5. . My turn to get 7 going and say the next number. Sevennn. (Signal.) 8. Your turn to get 7 going and say the next number. Sevennn. (Signal.) 8. • Get 4 going. Fouuur. Next number. (Signal.) 5. EXERCISE 6: SYMBOL IDENTIFICATION Get 6 going. Siiix. Next number. (Signal.) 7. (Repeat step a until firm.) a. (Display page.) [17:6A] b. This time we're going to get numbers going and count. One of these numbers is 3. My turn to get 8 going and count. Eieieight, 9, 10, 11. (Point to 3.) Here's the new number. What number? (Touch.) 3. • Your turn to get it going and count. Get 8 going. Eieieight. Count. b. (Point to 7.) Is this 3? (Touch.) No. (Tap 3.) 9, 10, 11. • What is it? (Touch.) 7. c. My turn to get 5 going and count. Fiiive, 6, 7, 8. Yes, 7. · Your turn to get it going and count. Get 5 going. Filive. Count. (Point to 5.) Is this 3? (Touch.) No. (Tap 3.) 6, 7, 8. • What is it? (Touch.) 5. d. Get 7 going. Sevennn. Count. (Tap 3.) 8, 9, 10. Yes. 5. • Get 2 going. Twooo. Count. (Tap 3.) 3, 4, 5. • (Point to 3.) Is this 3? (Touch.) Yes. (Repeat step d until firm.) -c. You'll tell me the names again when I touch under each thing. • (Point to 7.) Get ready. (Touch.) 7. - INDIVIDUAL TURNS -• (Point to 5.) Get ready. (Touch.) 5. (Call on individual children to perform one of the following tasks.) . (Point to 3.) Get ready. (Touch.) 3. • Get 7 going and count. Sevennn. (Tap 3.) 8, 9, 10. (Repeat step c until firm.) • Get 2 going and count. Twooo. (Tap 3.) 3, 4, 5.

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EXERCISE 9: COUNTING TWO GROUPS

a. (Display page and point to lines.) [17:9A] Here are two groups of lines. You're going to count the lines in each group.

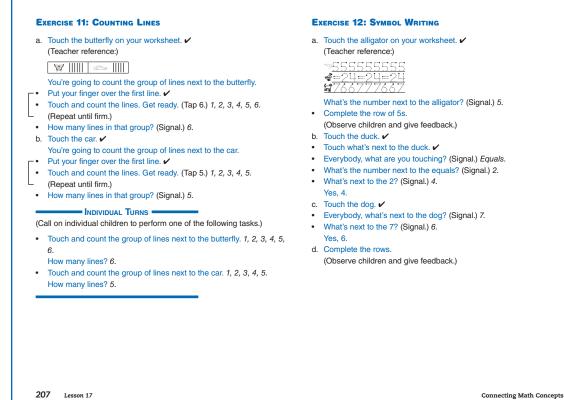
- (Point to IIIIII.) Count the lines in this group. Get ready. (Touch lines.) 1, 2, 3, 4, 5, 6, 7.
- How many lines are in this group? (Touch.) 7.
- b. (Point to II.) Count the lines in this group. Get ready. (Touch lines.) *1, 2.*
- How many lines are in this group? (Touch.) 2.
- c. (Point to IIIIIII.) I'm going to count the lines in both groups. (Touch lines in first group.) 1, 2, 3, 4, 5, 6, sevennn. (Touch lines in second group.) 8, 9.
- This time I'll count the first group. Then you'll keep on counting. (Touch lines in first group.) 1, 2, 3, 4, 5, 6, sevennn. (Touch lines in second group.) 8, 9.
- (Repeat until firm.)

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• How many lines in both groups? (Signal.) 9.

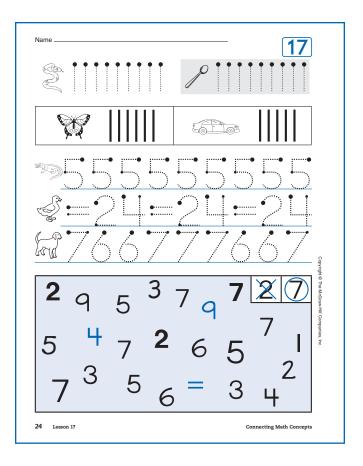
- d. You'll do the hard part again. (Touch line 7.) This is line 7.Which line? (Touch.) 7.
- You'll get it going and count the rest of the lines.
 Get 7 going. Sevennn. (Touch lines in second group.) 8, 9.
- e. Let's do the hard part again. I'll touch line 7. (Touch.)
- Get 7 going. Sevennn. (Touch lines in second group.) 8, 9.
 (Repeat until firm.)
- How many lines are in both groups? (Signal.) 9.

 a. (Write on the board:) I'm going to count to 3 and make a line for each number I count. For each number, I start at the big ball and make a line down. Watch. (Put chalk on first big ball.) One. (Make line and put chalk on next big ball.) Three. (Make line.) (Point to lines). How many lines did I make? (Touch.) 3. After I made each line, did you see how quickly I got ready to make the next line? (Children respond.) b. (Open workbooks to Lesson 17 and distribute to children.) (Hold up worksheet and point to insake.) 	 After I say 1, you'll make the line for that ball. What will you do after say 1? (Signal.) Make the line for that ball.
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EXERCISE 13: CROSS-OUT/CIRCLE GAME a. Touch the cross-out/circle game on your worksheet. \checkmark (Teacher reference:) **2**₉₅ ³7₉ **7** × Ø 5 4 7 **2** 6 5 1 $7^{3}5_{6}=34^{2}$ · You are going to cross out some things and circle other things. b. Touch the thing that's crossed out. • What are you going to cross out? (Signal.) 2. c. Touch the thing that's circled. ✔ • What are you going to circle? (Signal.) 7. (Repeat steps b and c until firm.) d. Again, what are you going to cross out? (Signal.) 2. Cross out all the 2s. (Observe children and give feedback.) e. You crossed out the 2s. Now you have to do something else. What do you have to do now? (Call on a child. Idea: Circle all the 7s.) You have to circle all the 7s. Do it. (Observe children and give feedback.) 208 Lesson 17 **Connecting Math Concepts**

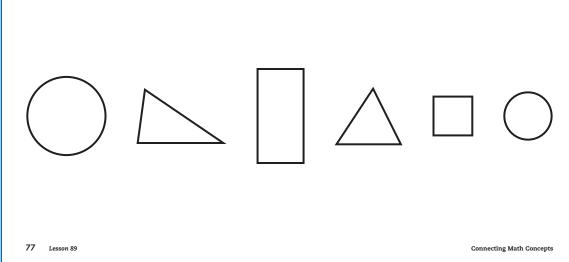


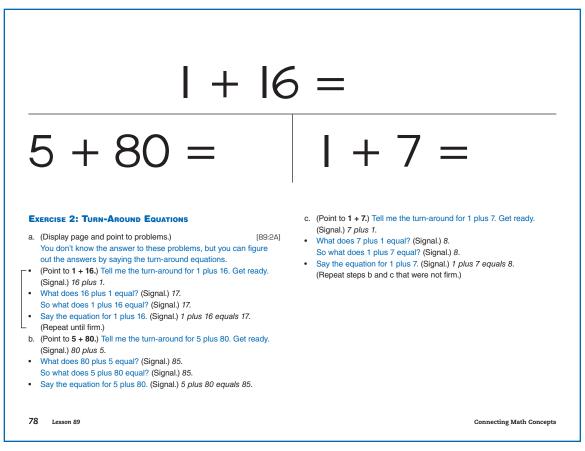


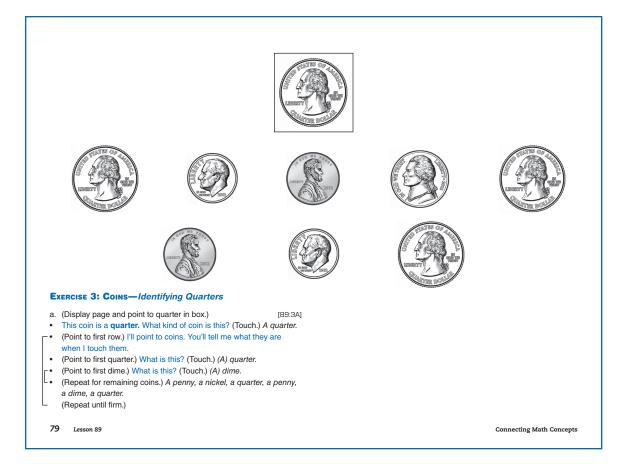
EXERCISE 1: SHAPES

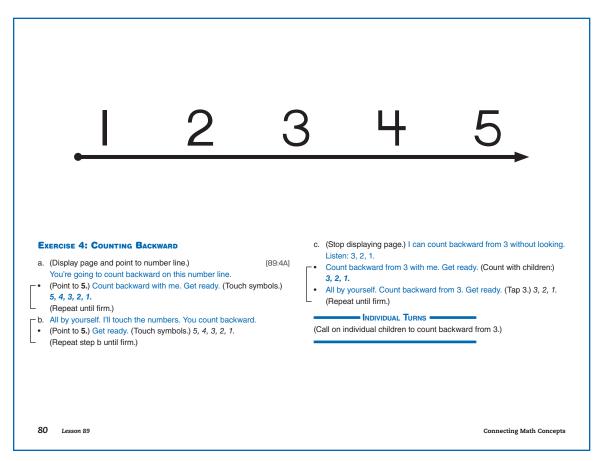
- a. You learned another name for a box. What's another name for a box? (Signal.) A rectangle.
- b. (Display page and touch either triangle.) [89:1A]
 This shape has three sides. It's a triangle. What is this shape? (Touch.) A triangle.
- c. (Point to objects.) You're going to tell me what these things are.
- (Point to first circle.) What is this shape? (Touch.) (A) circle.
- d. (Point to first triangle.) What is this shape? (Touch.) (A) triangle.
 How many sides does a triangle have? (Touch.) Three.
- How many sides does a mangle nave? (Touch.) Three.
- Point to rectangle.) What is this shape? (Touch.) A rectangle.
 (Repeat for remaining objects.) A triangle, a square, a circle.

(Call on individual children to identify one or two shapes.)









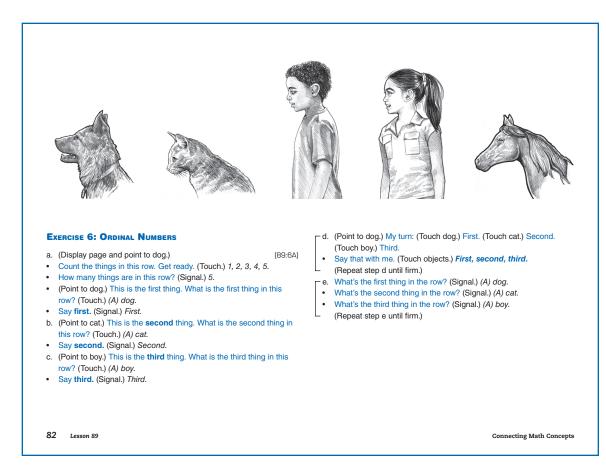
I34 I03 I50 I72 II3

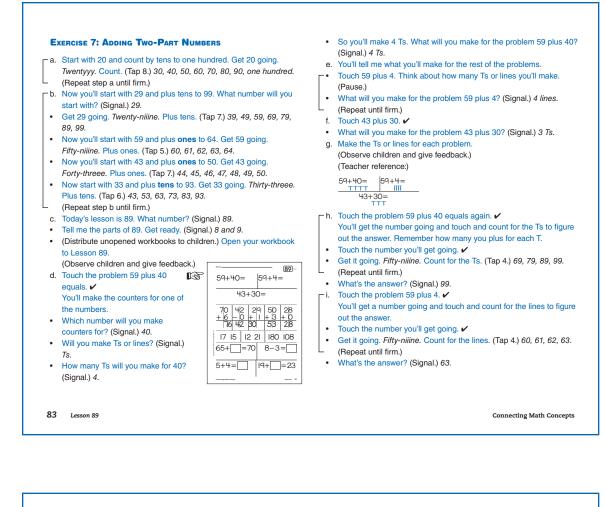
EXERCISE 5: SYMBOL IDENTIFICATION— Three-Part Numbers

- a. (Display page and point to numbers.) [89:5A] These three-part numbers don't have an underlined part. Remember, you say **one hundred** for the 1.
- What do you say for the 1? (Signal.) One hundred. Then you read the rest of the number.
- b. (Point to 134.) What do you say for the 1? (Touch.) One hundred.
- What do you say for the other part? (Touch.) 34.
- Say the whole number. (Touch.) One hundred 34.
- c. (Point to 103.) What do you say for the 1? (Touch.) One hundred.
- What do you say for the other part? (Touch.) 3.
- Say the whole number. (Touch.) One hundred 3.

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- d. For the rest of the numbers, you'll read the whole number.
 (Point to 150.) What's the whole number? (Touch.) One hundred 50.
 - (To correct:)
 - (Point to 150.) What do you say for 1? (Touch.) One hundred.
 - What do you say for the other part? (Touch.) 50.
 - Say the whole number. (Touch.) One hundred 50.
- (Point to 172.) What number? (Touch.) 172.
- (Point to 113.) What number? (Touch.) 113.
- (Repeat steps b through d until firm.)





EXERCISE 9: MORE

- a. I'll say two numbers. You'll say them; then you tell me which is more.
- Listen: 180 and one hundred 8. Say 180 and 108. (Signal.) 180 and 108.
- Which is more? (Signal.) 180.
- Listen: 21 and 12. Say 21 and 12. (Signal.) 21 and 12.
- Which is more? (Signal.) 21.
- (Repeat step a until firm.)
- b. I'll say two weights. You'll say them; then you tell me which is heavier.
- Listen: 63 ounces and 47 ounces. Say 63 ounces and 47 ounces.
 (Signal.) 63 ounces and 47 ounces.
- Which is heavier? (Signal.) 63 ounces.
- Listen: 29 pounds and 38 pounds. Say 29 pounds and 38 pounds. (Signal.) 29 pounds and 38 pounds.
- Which is heavier? (Signal.) 38 pounds.
- Listen: 17 pounds and 15 pounds. Say 17 pounds and 15 pounds. (Signal.) 17 pounds and 15 pounds.
- Which is heavier? (Signal.) 17 pounds.
- Listen: 19 tons and 21 tons. Say 19 tons and 21 tons. (Signal.) 19 tons and 21 tons.
- Which is heavier? (Signal.) 21 tons.
- (Repeat step b until firm.)

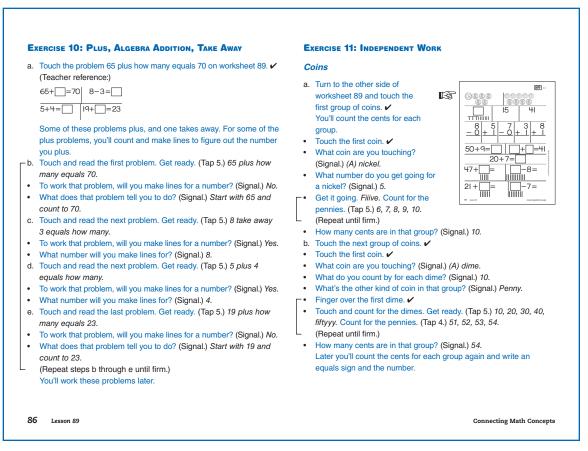
 c. Touch the numbers 17 and 15 on worksheet 89. ✓ (Teacher reference:)

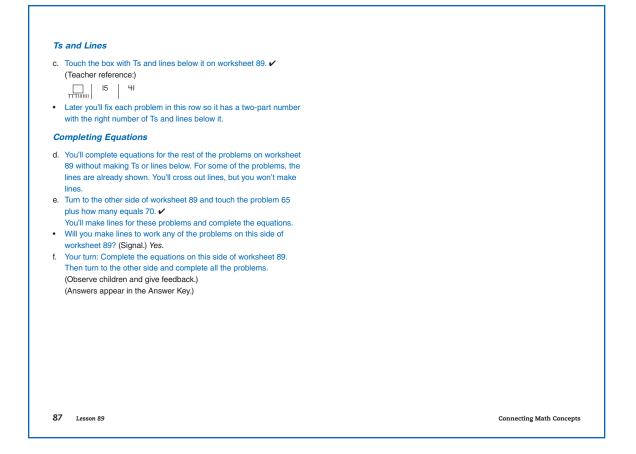
17 15 12 21 180 108

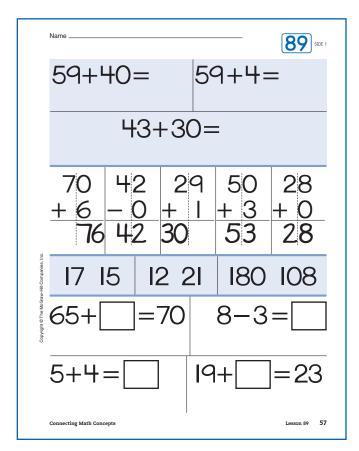
- You're going to circle the numbers that are more.
- Which is more, 17 or 15? (Signal.) 17.
- d. Touch the next group of numbers. 🗸
- What's the first number? (Signal.) 12.
- What's the other number? (Signal.) 21.
- Which is more, 12 or 21? (Signal.) 21.
- e. Touch the last group of numbers. 🗸
- What's the first number? (Signal.) 180.
- What's the other number? (Signal.) 108.
- Which is more, 180 or 108? (Signal.) 180.
- f. Circle the number that is more in each group. (Observe children and give feedback.) (Answer key:)

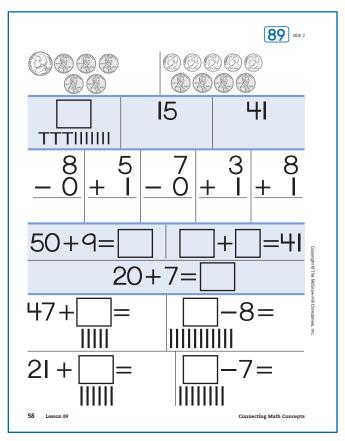
(17) 15 | 12 (21) (180) 108

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