


Grade 4 Mathematics

Number and Number Relations: Lesson 13

Read aloud to the students the material that is printed in **boldface type** inside the boxes. Information in regular type inside the boxes and all information outside the boxes should **not** be read to students. Possible student responses are included in parentheses after the questions.

NOTE: The directions read to students may depend on the available materials. Read only those parts of the lesson that apply to the materials you are using.

Any directions that ask you to do something, such as to turn to a page or to hand out materials to students, will have an arrow symbol () by them.

Purpose of Lesson 13:

- In this lesson, the tutor and the students will
 - ✓ analyze word problems by choosing the correct numbers to fill in the blanks so that a problem makes sense.

Equipment/Materials Needed:

- Copies of Student Sheet 88
- Paper and pencils
- Chalkboard
- Calculators (optional)

Preparations before beginning Lesson 13:


- Run one copy of Student Sheet 88 for each student.
- Have paper and pencils available.
- Borrow calculators from one of the teachers if you decide to use them.

Lesson 13: Number and Number Relations

This lesson, as did Lesson 11 and 12 in Number Relations, focuses on analyzing word problems. This time, the emphasis will be on choosing the correct numbers so that a problem makes sense. Some of the problems involve money, time, and measurement.


Say:

In today's lesson, you are going to look at problems in which the numbers are missing. You will be given a set of numbers from which you can choose to fill in the blanks. You must make sure that the numbers you choose make sense in the problem. It would be wise to read the entire problem before you start placing numbers.

 Give Student Sheet 88 to the students. You may want to cut the sheet into individual problems so that the students focus on only one problem at a time. Discussion is very important on each of the problems. Because these problems involve guessing and checking, you may want to allow calculators. Some of these problems may be difficult for the students, but the problems can all be solved by guessing and checking. It will really help if they read the entire problem before placing any numbers. If they place a number incorrectly, they simply need to move it and try another number.

Answers:

1. 10, 12, 22
The order of the 10 and 12 could be swapped.
2. 5, 2, 3, 7
The order of the 2 and 3 could be swapped.
3. 35, 45, 10, 1
4. 3, 180, 20, 2, 40
5. 2; 9; 12; 108; 42
The order of 9 and 12 could be swapped.
6. 7; 9; 11; 2; 27; 3
7. 9; 5; 2; 11; 17
8. 120; 12; 9; 3; 2
9. 31; 8; 14; 2; 9
10. \$70; 6; \$10; \$4.75; \$5.25
The order of \$4.75 and \$5.25 could be swapped.

 Have one student summarize today's lesson. This lesson will help students focus on how the information in a problem must make sense.

Student Sheet 88 (Number Relations: Lesson 13)

Each problem below has some data missing. Fill in the blanks with the correct numbers from the boxes. You can use each number only once. Remember that your problem must make sense. Be ready to explain your choices.

1. Jeff is _____ years old. His sister, Charley, is _____ years older than he is. Charley is _____ years old.

22	10	12
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2. Shanna has _____ kittens and _____ puppies. She has _____ more kittens than puppies. Altogether she has _____ pets.

3	2	7	5
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3. After school, Jolice worked on her computer for _____ minutes. She then completed her homework in _____ minutes. She spent _____ minutes longer on her homework than on working on the computer. She spent more than _____ hour(s) doing both tasks.

1	10	45	35
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4. Pedro spent _____ hours mowing lawns. This time is the same as _____ minutes. He earned \$_____ for each lawn mowed. Since he mowed _____ in this time, he earned \$_____.

180	2	3	20	40
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5. Tara was building a pen for her _____ dogs. She wanted the pen to give the dogs a lot of area in which to run around. She also wanted to build a fence, so she had to find the perimeter. She decided the pen should measure _____ ft. by _____ ft. The area of the pen would be _____ square feet and the perimeter would be _____ feet.

108	9	42	12	2
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Student Sheet 88 (Number Relations: Lesson 13) continued

6. Devon purchased _____ Pokèmon cards in June, _____ in July, and _____ in August. Each month he bought _____ more than the month before. He bought _____ Pokèmon cards in the _____ months.

3	7	27	2	9	11
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7. Mai went to the Crawfish Festival in Westwego. The festival opened at _____ a.m. and closed at _____ p.m. Mai got to the fair when it opened and stayed for _____ hours. She left at _____ a.m. She saw _____ of her friends, which was well over a dozen friends.

5	11	17	2	9
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8. The Cartwright family went on a canoeing trip. They drove _____ miles to get to the river. The first day they paddled _____ miles, and on the second day they paddled _____ miles. The second day they paddled _____ miles less than the first day. It took them about _____ hours to get home.

12	3	2	9	120
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9. Juanita's baby brother was born on July _____. He weighed _____ pounds and _____ ounces. If he gains _____ ounces, he will weigh _____ pounds. (Remember 1 pound = 16 ounces.)

8	14	2	9	31
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10. Ellis had \$_____ to spend. He ordered _____ CD's. Each CD cost \$_____. The shipping charge on the order was \$_____. Ellis will have \$_____ left over.

6	\$4.75	\$10	\$70	\$5.25
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