

Name _____

Lesson 3.5

Algebra • Relate Addition and Subtraction

Essential Question How are addition and subtraction related?



Operations and Algebraic Thinking—2.OA.B.2

MATHEMATICAL PRACTICES
MP2, MP6, MP8

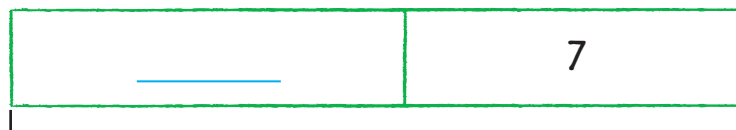
Listen and Draw



Complete the bar model to show the problem.



_____ soccer balls



15

_____ soccer balls



FOR THE TEACHER • Read the following problems. Have children complete the bar model for each. The soccer team has 8 red balls and 7 yellow balls. How many soccer balls does the team have? The soccer team has 15 balls inside the locker room. The children took the 7 yellow balls outside. How many soccer balls were inside?

Math Talk

MATHEMATICAL PRACTICES 6

Explain how the bar models for the problems are alike and how they are different.

Model and Draw

You can use addition facts to remember **differences**. Related facts have the same whole and parts.

Think of the addends in an addition fact to find the difference for a related subtraction fact.



13

$$6 + 7 = \underline{13}$$



13

$$13 - 7 = \underline{\quad}$$

Share and Show



Write the sum and the difference for the related facts.

1. $5 + 4 = \underline{\quad}$

$$9 - 4 = \underline{\quad}$$

2. $2 + 7 = \underline{\quad}$

$$9 - 2 = \underline{\quad}$$

3. $3 + 8 = \underline{\quad}$

$$11 - 8 = \underline{\quad}$$

4. $5 + 8 = \underline{\quad}$

$$13 - 5 = \underline{\quad}$$

5. $\underline{\quad} = 1 + 8$

$$\underline{\quad} = 9 - 1$$

6. $9 + 9 = \underline{\quad}$

$$18 - 9 = \underline{\quad}$$

7. $\underline{\quad} = 8 + 7$

$$\underline{\quad} = 15 - 8$$

8. $4 + 7 = \underline{\quad}$

$$11 - 7 = \underline{\quad}$$

9. $7 + 5 = \underline{\quad}$

$$12 - 7 = \underline{\quad}$$

Name _____



On Your Own

Write the sum and the difference for the related facts.

10. $4 + 3 = \underline{\quad}$
 $7 - 3 = \underline{\quad}$

11. $2 + 6 = \underline{\quad}$
 $8 - 6 = \underline{\quad}$

12. $6 + 4 = \underline{\quad}$
 $10 - 6 = \underline{\quad}$

13. $7 + 3 = \underline{\quad}$
 $10 - 7 = \underline{\quad}$

14. $8 + 6 = \underline{\quad}$
 $14 - 6 = \underline{\quad}$

15. $\underline{\quad} = 3 + 9$
 $\underline{\quad} = 12 - 9$

16. $6 + 5 = \underline{\quad}$
 $11 - 5 = \underline{\quad}$

17. $7 + 7 = \underline{\quad}$
 $14 - 7 = \underline{\quad}$

18. $9 + 6 = \underline{\quad}$
 $15 - 9 = \underline{\quad}$

19. $5 + 9 = \underline{\quad}$
 $14 - 9 = \underline{\quad}$

20. $\underline{\quad} = 4 + 8$
 $\underline{\quad} = 12 - 4$

21. $9 + 7 = \underline{\quad}$
 $16 - 7 = \underline{\quad}$

MATHEMATICAL PRACTICE 6

Make Connections

Write a related subtraction fact for each addition fact.

22. $7 + 8 = 15$

23. $5 + 7 = 12$

24. $6 + 7 = 13$

25. $9 + 8 = 17$

Problem Solving • Applications

WRITE

Math

Solve. Write or draw to explain.

26. Trevor has 7 kites. Pam has 4 kites. How many more kites does Trevor have than Pam?



_____ more kites

27. **THINK SMARTER** Mr. Sims has a bag of 7 pears and a bag of 6 pears. His family eats 5 pears. How many pears does he have now?



_____ pears

28. **THINK SMARTER** Elin counts 7 geese in the water and some geese on the shore. There are 16 geese in all. Draw a picture to show the two groups of geese.

Write a number sentence that can help you find how many geese are on the shore.

How many geese are on the shore?

_____ geese



TAKE HOME ACTIVITY • Ask your child to name some subtraction facts that he or she knows well.

Name _____

Algebra • Relate Addition and Subtraction**COMMON CORE STANDARD—2.OA.B.2**
Add and subtract within 20.

Write the sum and the difference for the related facts.

1. $9 + 6 = \underline{\quad}$

$15 - 6 = \underline{\quad}$

2. $8 + 5 = \underline{\quad}$

$13 - 5 = \underline{\quad}$

3. $9 + 9 = \underline{\quad}$

$18 - 9 = \underline{\quad}$

4. $7 + 3 = \underline{\quad}$

$10 - 3 = \underline{\quad}$

5. $7 + 5 = \underline{\quad}$

$12 - 5 = \underline{\quad}$

6. $6 + 8 = \underline{\quad}$

$14 - 6 = \underline{\quad}$

7. $6 + 7 = \underline{\quad}$

$13 - 6 = \underline{\quad}$

8. $8 + 8 = \underline{\quad}$

$16 - 8 = \underline{\quad}$

9. $6 + 4 = \underline{\quad}$

$10 - 4 = \underline{\quad}$

Problem Solving

Solve. Write or draw to explain.

10. There are 13 children on the bus. Then 5 children get off the bus. How many children are on the bus now?

_____ children

II.



- Write a related subtraction fact for $9 + 3 = 12$. Explain how the two facts are related.

Lesson Check (2.OA.B.2)

1. Write a related addition fact for $15 - 6 = 9$.

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

2. Write a related subtraction fact for $5 + 7 = 12$.

$$\underline{\quad} - \underline{\quad} = \underline{\quad}$$

Spiral Review (2.NBT.A.1, 2.NBT.A.3, 2.NBT.B.8)

3. What is another way to write 4 hundreds?

4. What is the next number in the pattern?

515, 615, 715, 815, _____

5. What number is 10 more than 237?

6. Write the number 110 as a sum of hundreds and tens.

$$\underline{\quad} + \underline{\quad}$$

