

Name _____

Number Patterns

COMMON CORE STANDARD CC.3.OA.9

Solve problems involving the four operations, and identify and explain patterns in arithmetic.

Find the sum. Then use the Commutative Property of Addition to write the related addition sentence.

1. $9 + 2 = 11$ 4. $3 + 10 = \underline{\quad}$ 7. $8 + 9 = \underline{\quad}$
 $2 + 9 = 11$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

2. $4 + 7 = \underline{\quad}$ 5. $6 + 7 = \underline{\quad}$ 8. $0 + 4 = \underline{\quad}$
 $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

3. $3 + 6 = \underline{\quad}$ 6. $7 + 5 = \underline{\quad}$ 9. $9 + 6 = \underline{\quad}$
 $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$ $\underline{\quad} + \underline{\quad} = \underline{\quad}$

Is the sum even or odd? Write *even* or *odd*.

10. $5 + 2$ _____ 11. $6 + 4$ _____ 12. $1 + 0$ _____
 13. $5 + 5$ _____ 14. $3 + 8$ _____ 15. $7 + 7$ _____

Problem Solving 

16. Ada writes $10 + 8 = 18$ on the board. Maria wants to use the Commutative Property of Addition to rewrite Ada's addition sentence. What number sentence should Maria write?

17. Jackson says he has an odd number of model cars. He has 6 cars on one shelf and 8 cars on another shelf. Is Jackson correct? **Explain.**

Lesson Check (CC.3.OA.9)

- Marvella says that the sum of her addends is odd. Which of the following could be Marvella's addition problem?
 (A) $5 + 3$ (C) $2 + 8$
 (B) $9 + 7$ (D) $5 + 6$
- Which number sentence shows the Commutative Property of Addition?
 $3 + 9 = 12$
 (A) $12 - 9 = 3$ (C) $9 + 3 = 12$
 (B) $12 = 8 + 4$ (D) $12 - 3 = 9$

Spiral Review (Reviews CC.2.MD.3, CC.2.MD.8, CC.2.MD.10)

- Amber has 2 quarters, a dime, and 3 pennies. How much money does Amber have? (Grade 2)
 (A) 53¢ (C) 63¢
 (B) 58¢ (D) 68¢
- Josh estimates the height of his desk. Which is the best estimate? (Grade 2)
 (A) 1 foot (C) 5 feet
 (B) 2 feet (D) 9 feet

Use the bar graph for 5–6.

- Who read the most books? (Grade 2)
 (A) Alicia
 (B) Bob
 (C) Juan
 (D) Maria
- Who read 3 more books than Bob? (Grade 2)
 (A) Alicia
 (B) Juan
 (C) Maria
 (D) no one

