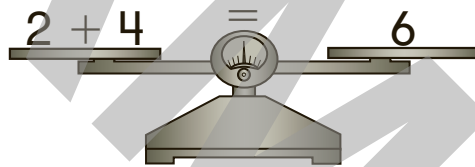# Addition and Subtraction Equations

1.OA.7   Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false.

Understand the Standards

In a number sentence, the **equal sign** means that the sides are **balanced**. The numbers on one side of the equal sign are equal to the numbers on the other side of the equal sign.

Words to Know
equal sign
balance

$$2 + 4 = 6$$

A number sentence can be true or false.

$$6 + 4 = 10 \text{ is true.}$$

$$6 - 4 = 10 \text{ is false.}$$

Guided Instruction

You can find if a number sentence is true or false.

Is $8 + 7 = 14$ true or false?

Step 1 Find the sum of $8 + 7$.
$$8 + 7 = 15$$

Step 2 Compare both sides of the number sentence.
$$15 = 14 \text{ is false.}$$

$$8 + 7 = 14 \text{ is false.}$$

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Which symbol will make the sentence true?

$$9 \bigcirc 6 = 3$$

Try $+$: $9 + 6 = 3$; $15 = 3$; This is false.

Try $-$: $9 - 6 = 3$; $3 = 3$; This is true.

The symbol that makes the sentence true is $-$.

$9 - 6 = 3$

On Your Own

Write if each sentence is true or false.

1. $3 + 9 = 12$ 2. $13 - 4 = 8$ 3. $8 + 8 = 14$

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4. $13 - 5 = 8$ 5. $2 + 0 = 20$ 6. $4 + 2 = 6$

_____   _____   _____

7. $4 + 7 = 10$ 8. $18 - 9 = 9$ 9. $9 - 7 = 3$

_____   _____   _____

10. $14 - 4 = 1$ 11. $7 + 6 = 13$ 12. $14 - 8 = 5$

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Elevate 13. Hector writes $6 + 5 = 12 - 1$. Is this number sentence true? Explain.

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Write if each sentence is true or false.

14. $5 + 5 = 10$ 15. $17 - 9 = 8$ 16. $16 - 8 = 8$

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17. $6 - 2 = 4$ 18. $15 - 9 = 7$ 19. $4 + 8 = 14$

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Write $+$ or $-$ to make each sentence true.

20. $15 \bigcirc 3 = 12$ 21. $7 \bigcirc 2 = 9$ 22. $9 \bigcirc 4 = 5$

23. $3 \bigcirc 2 = 5$ 24. $14 \bigcirc 7 = 7$ 25. $10 \bigcirc 1 = 11$

Solve. Share your answers with a classmate.

(Elevate) 26. Ted says that $4 + 3 = 1$ is a true number sentence. Is Ted correct? Tell why or why not.

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Answer the questions below.

27. Which number sentence is true?

    A. $4 + 9 = 49$

    B. $15 - 7 = 9$

    C. $7 + 6 = 12$

    D. $16 - 9 = 7$

28. Which symbol makes the number sentence true?

$$11 \bigcirc 5 = 6$$

    A. $+$

    B. $-$

    C. $>$

    D. $<$

29. Circle the number sentences that are true.

$$3 + 8 = 11 \quad 11 - 6 = 4 \quad 6 - 4 = 2$$
$$8 + 5 = 12 \quad 12 - 6 = 6$$

(Elevate) 30. Write the symbol that will make this number sentence true. Tell how you found your answer.

$$8 + 2 = 7 \bigcirc 3$$

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