Subtraction Strategies

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Subtraction strategies are different ways to solve subtraction problems more easily. These methods help us subtract faster and understand the concept better. They are useful for mental math and written problems.

Common Subtraction Strategies

i. Count Back Strategy

Start from the bigger number and count back the smaller number

Example: 12 – 3 \rightarrow Count back 3 steps from 12 \rightarrow 11, 10, 9 \rightarrow Answer is 9

ii. Break Apart (Place Value) Strategy

Break the numbers into tens and ones and subtract separately

Example: $74 - 31 \rightarrow (70 - 30) + (4 - 1) = 40 + 3 = 43$

iii. Subtract Using Number Line

Start at the bigger number and jump back by ones or tens to subtract

Example: 56 – 24 \rightarrow Jump back 20 to get 36, then jump 4 more to get 32

iv. Compensation Strategy

Round the number and subtract, then adjust

Example: $100 - 49 \rightarrow$ Think 100 - 50 = 50, then add 1 back $\rightarrow 51$

v. Using Doubles Strategy

Use known doubles to subtract

Example: $14 - 7 \rightarrow$ Know that $7 + 7 = 14 \rightarrow$ So, answer is 7

Properties of Subtraction

Subtraction is not commutative: $15 - 7 \neq 7 - 15$ Subtracting 0 does not change the number: 82 - 0 = 82Subtracting a number from itself gives 0: 29 - 29 = 0**Example 1:**

Question: Subtract 63 – 29 using the break apart strategy

Solution: Break into tens and ones

63 = 60 + 3 29 = 20 + 9 $(60 - 20) + (3 - 9) \rightarrow 40 + (-6) = 34$ Answer: 63 - 29 = 34

Example 2:

Question: Subtract $\frac{5}{6} - \frac{2}{6}$

Solution: Denominators are same, so subtract numerators

5 - 2 = 3 → Answer =
$$\frac{3}{6}$$

Answer: $\frac{5}{6} - \frac{2}{6} = \frac{3}{6}$

Summary Points

- Subtraction strategies help solve problems quickly and correctly
- You can count back, break apart, use a number line or adjust numbers
- Always subtract the smaller number from the bigger number
- Subtracting fractions is easy when denominators are the same
- Practice different strategies to build strong subtraction skills