

Addition Fact Strategies

Strategy	Strategy Description	Examples
For the strategies below, start with pictures & objects before moving to algorithms (<i>number sentences</i>).		
Counting On- One-more-than/Two-more-than	Used when adding 1 or 2 to a given number.	$4 + 1$ $10 + 2$
Facts with 0	Used when added zero to a quantity, the sum is the same amount.	$6 + 0$ $0 + 3$
Make Ten	When adding 7, 8 or 9 making them a 10 and adding the adjusted number. In the example decompose (<i>process of separating numbers into smaller number equal to the original</i>) the 5 to $2 + 3$ then add the 2 to the 8 making 10. Then add $10 + 3$ to get the sum 13.	$8 + 5$ $8 + (2 + 3)$ $8 + 2 + 3$ $(8 + 2) + 3$ $10 + 3$
Combinations of Ten	Grouping the numbers to find expressions (<i>numbers, symbols & operations grouped together that show the value of something</i>) that would equal 10.	$7 + \quad = 10$ $+ 3 = 10$
Doubles	Adding two of the same number together.	$2 + 2$ $8 + 8$
Doubles + 1	Finding a double hidden in the fact where one addend is one more than the other.	$4 + 5 = 4 + (4 + 1)$ $6 + 7 = 6 + (6 + 1)$
Doubles + 2 Two-Apart Facts	Finding a double hidden in the fact where one addend is two more than the other. In the example $3 + 5$ is double 3 and 2 more.	$3 + 5$ $3 + (3 + 2)$ $3 + 3 + 2$
+ 9 Add 10 and take 1 away	When an addend is 9, then just add 10 and take 1 away from the sum. This skill is useful with larger numbers.	$12 + 9$ $12 + 10 = 22 - 1$ 21
+ 4 Add 2 and add 2	When an addend is 4, add 2 and then add 2 again.	$7 + 4$ $7 + (2 + 2)$ $(7 + 2) + 2$ $9 + 2$
+ 10	When adding a number to ten, the place value of the "ten's digit" increases.	$10 + 18$

Bolded Words are Critical Mathematical Vocabulary.

Subtraction Fact Strategies

Strategy	Subtraction Description	Example
For the strategies below, start with pictures & objects before moving to algorithms (<i>number sentences</i>).		
- 0 from a number	When subtracting zero to a quantity, the sum is the same amount.	7-0 13-0
- 1 from a number	When subtracting 1 from a number, the quantity is one less than the original number.	6-1 17-1
- a number from itself	When subtracting a number from itself the quantity is zero.	4-4 12-12
Subtracting within 10	Students should be able to subtract fluently within 10.	9-7 6-2
Subtracting from 10	When subtracting from 10, compose (<i>process of combining numbers to make a larger number</i>) 10 finding the number that could be added to the subtracted number to make 10.	10-4 4 + = 10
Build Up Through Ten	Used when either the subtrahend or minuend is 8 or 9. (<i>Subtrahend/minuend- the number subtracted from the total</i>)	14-9 <i>start with 9 and work up through 10: 9 and 1 is 10 and 4 more makes 5</i>
Back Down Through Ten	Working backward with 10 as a "bridge".	15-6 Take 5 away from 15 to get to ten. Then take one more away, leaving 9.
Subtracting half facts	Utilizing doubles facts to determine the quantity	8-4 4 + 4 = 8 So 8 - 4 = 4
Fact Families	Think of the fact family to recall the missing number.	16 - 9 9 + = 16
Subtracting difference of 1 or 2	Used with subtracting 1 and 2 from a given number. Using one less than for subtracting 1 and then repeating the process when subtracting 2	7-1 or 13-2
- 10 from a teen number	When subtracting ten from a number, the place value of the "ten's digit" decreases.	13-10 or 17-10
- 8 or 9	When subtracting 9 from a number, subtract 10 and add 1 more than . When subtracting 8 from a number subtract 10 and add 1 more and 1 more (or +2).	13-9 13-10 + 1
Think Addition	Using the known addition facts to solve the subtraction problem by using the inverse (<i>opposite</i>) of addition.	13-5 Think what goes with 5 to make 13?

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