

How to Use Number Grids

Number grids are a tool for helping students learn the mental addition strategy of adding from the left. Consider the sum: $66 + 27 = ?$

The student puts a finger on 66. The student first adds 20 by moving the finger down two rows, to 86. The student thinks, “66 + 20 makes 86”. To add the 7, the student can use the “make the next 10” strategy and think, “86 + 4 makes 90, and 3 more makes 93.”

Alternatively, the student might first add 30 by moving a finger from 66 to 96, and thinking, “66 + 30 = 96. That is 3 too many. So I take 3; so 93.”

The difference $54 - 28 = ?$ could be done in a variety of ways:

- by starting at 54, and moving the finger up two rows to 34. The student thinks, “54 take 20 is 34, take 4 more makes 30, and 4 more to make 26.”
- by starting at 54, moving the finger up three rows to 24, and then adding 2 to make 26. The student thinks, “54 take 30 is 24, plus 2 more makes 26.”
- by starting at 28, and finding what has to be added to make 54, e.g. “28 + 30 makes 58, so 4 less, or 26.”

In each case, the Grid is a scaffold that helps the student see what they need to do.

Further notes:

Students may need to be taught the “Make to 10” strategy first. The Ten Frame is a useful scaffold for this.

A student should have a range of strategies available, and be able to choose one that is effective for that particular question.

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11	12	13	14	15	16	17	18	19	20
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41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
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91	92	93	94	95	96	97	98	99	100

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