Purpose and Influence!

Jump on Number Lines

Gail Cotton

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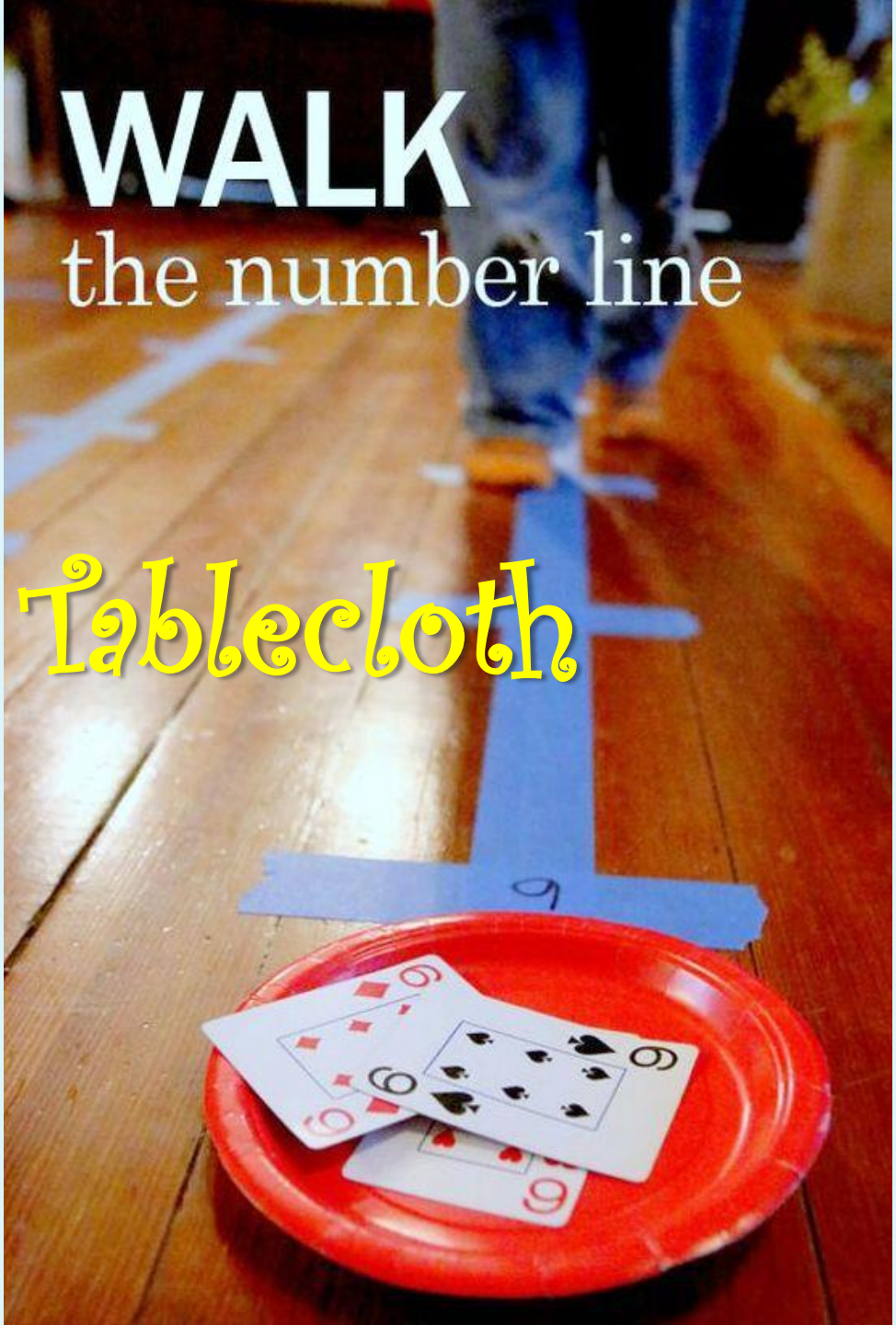
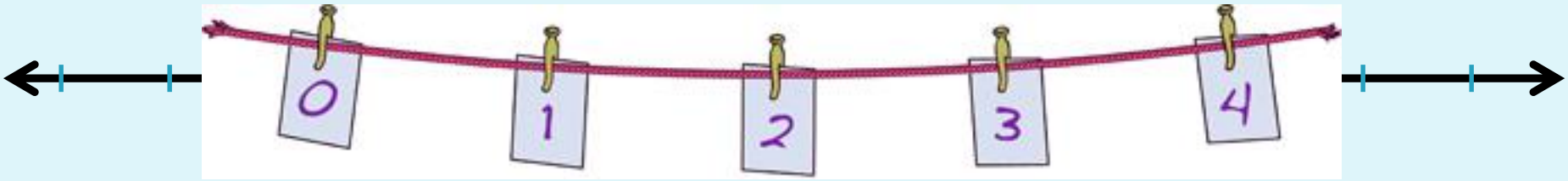
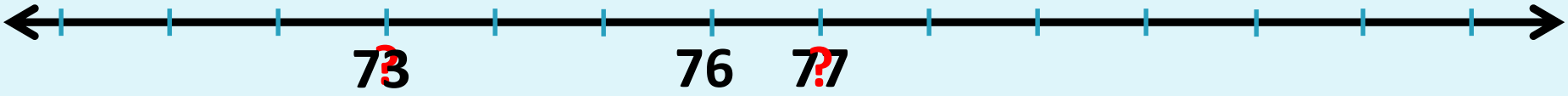

WALK
the number line
Tablecloth

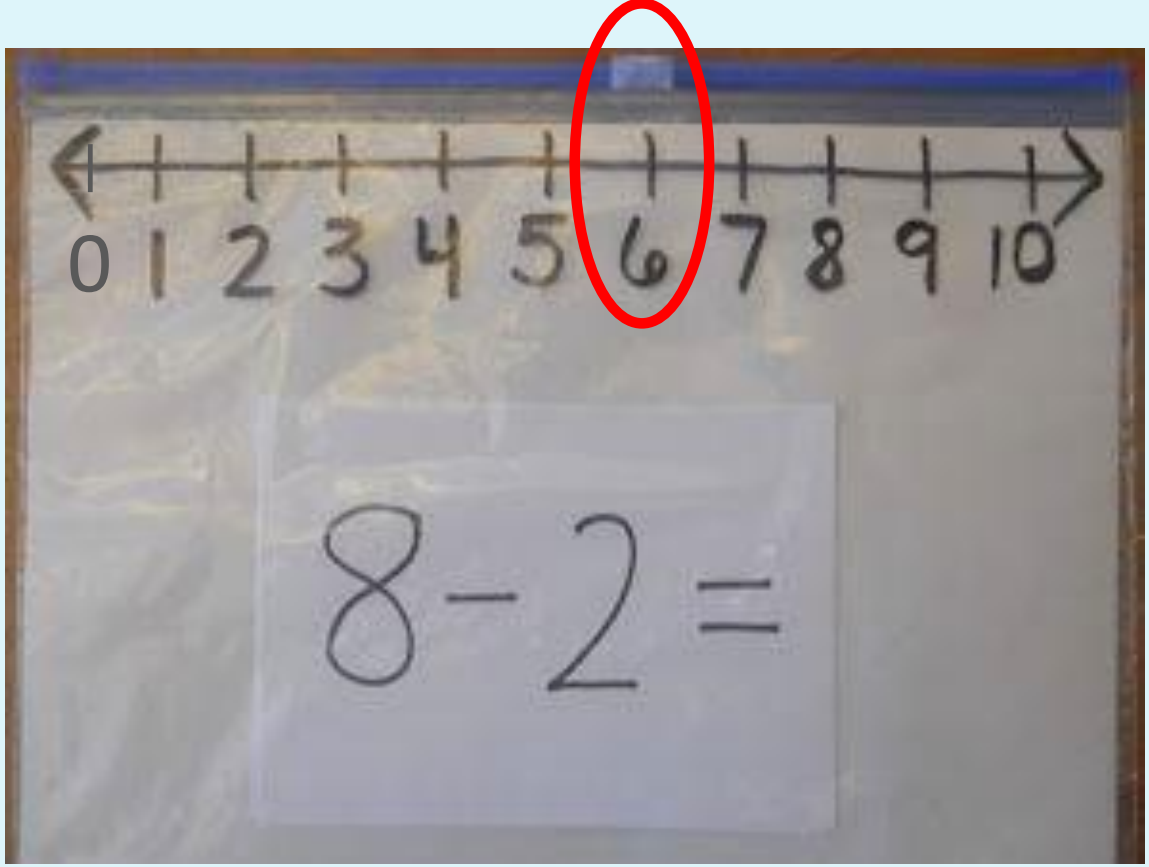
15
16
17
18

Open Number Line Manipulatives

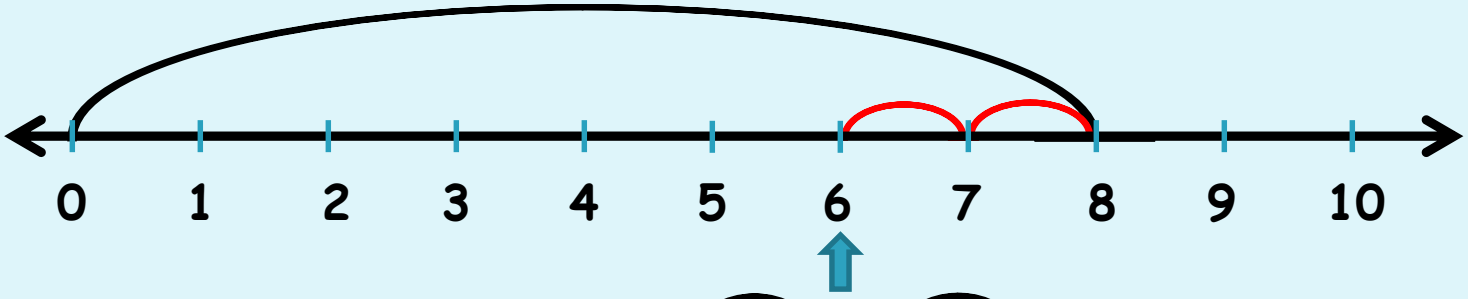


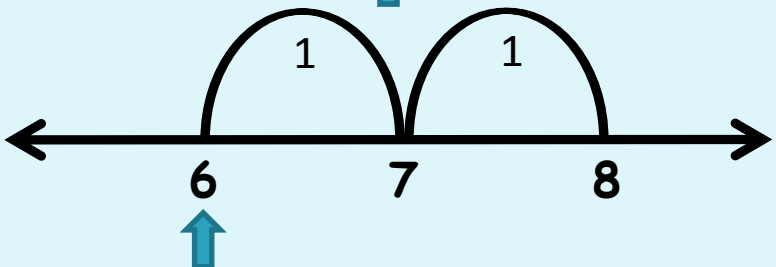


Number Line Game – Sentence Strips


0 1 2 3 4 5 6 7 8 9 10
8 - 2 =

slider
control deslizante
Storage
bags
20


0 1 2 3 4 5 6 7 8 9 10


1
1
6 7 8

8 - 2 = 6

Open Number Line Beginning Skills

Your students need these concepts before they take on open number lines

Smaller numbers to the left

Bigger numbers to the right

Counting by 10s from any number

forward

and backward

Decomposing numbers

27

20 7

The concept of "friendly numbers" (multiples of 10)

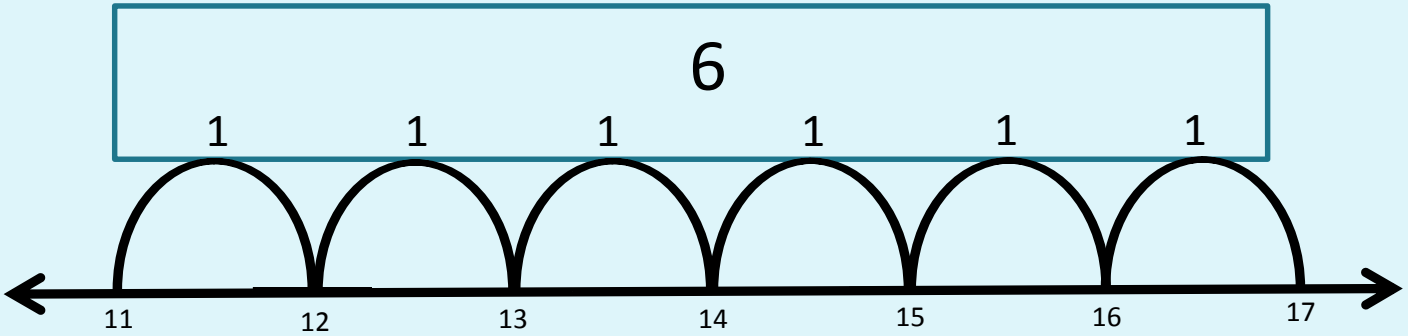
30 70 50 90 20

Combinations that make 10

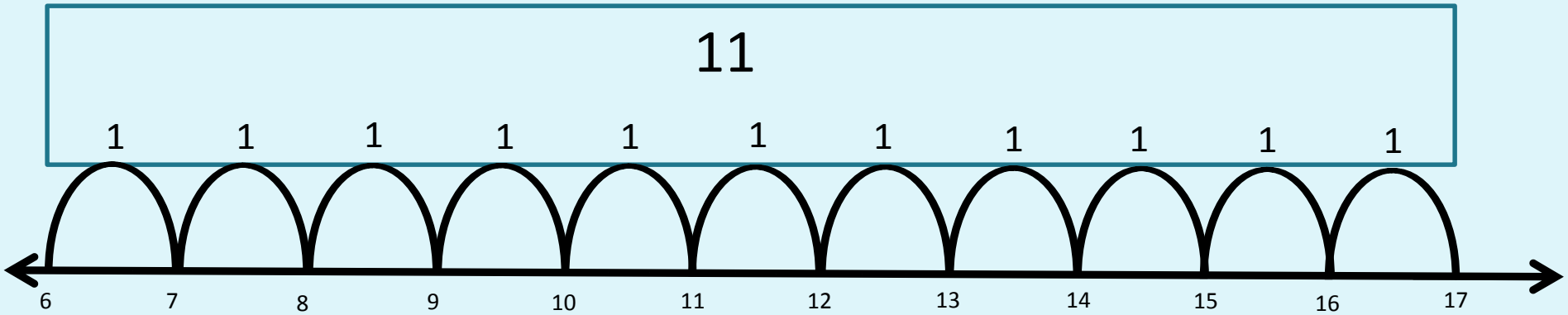
1	9
2	8
3	7
4	6
5	5

Open Number Line Manipulatives

Mrs. Smith's class has 6 fewer jump ropes than Mr. Lopez's class. Mr. Lopez's class has 17 jump ropes. How many jump ropes does Mrs. Smith's class have?



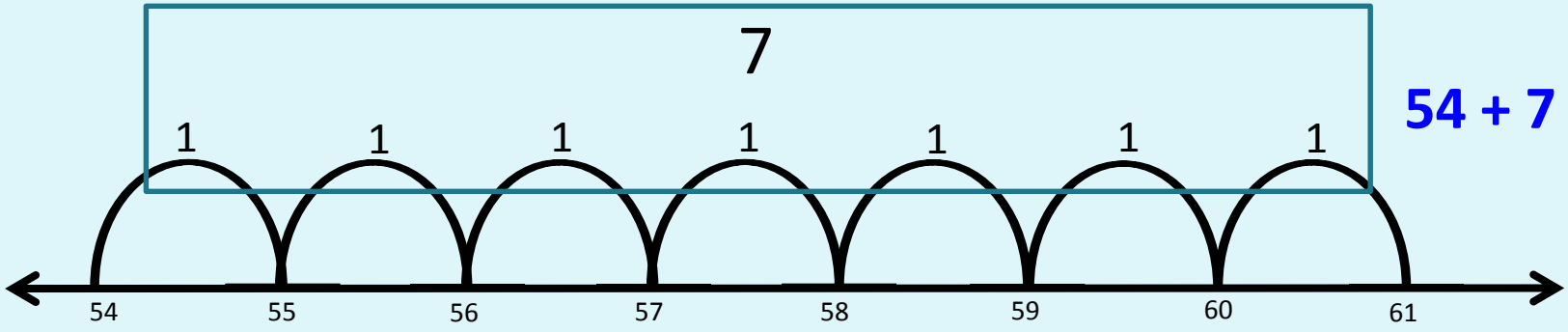
11 jump ropes
17 – 6 = ?



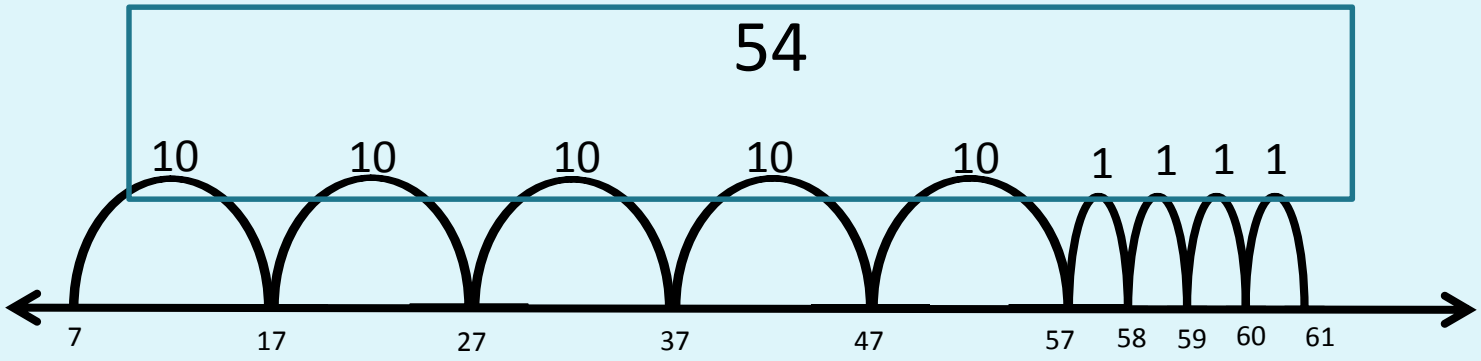
11 jump ropes
6 + ? = 17

Open Number Line Manipulatives

54 + 7 = ?

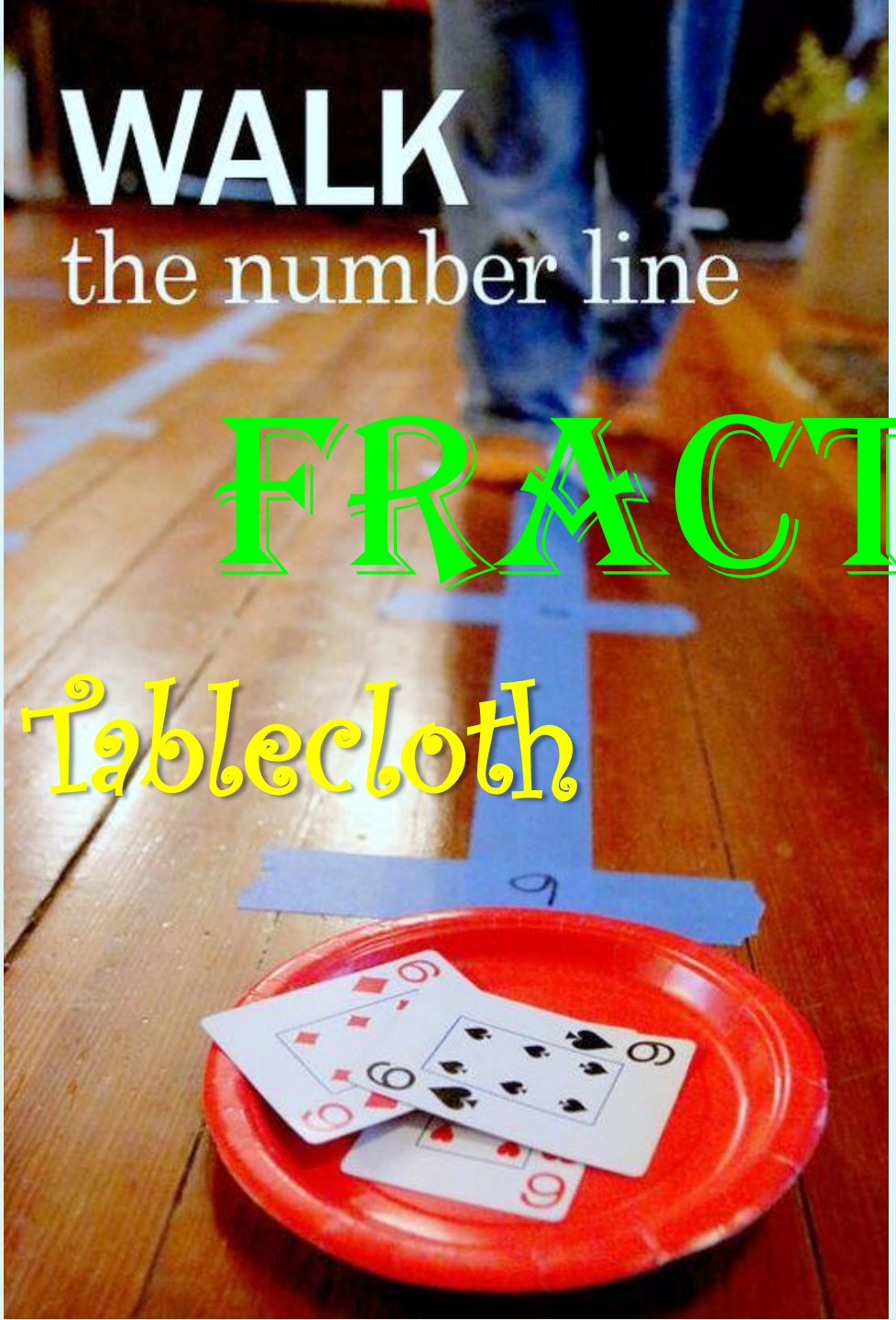


54 + 7 = 61



7 + 54 = 61

7 + 54 = ?

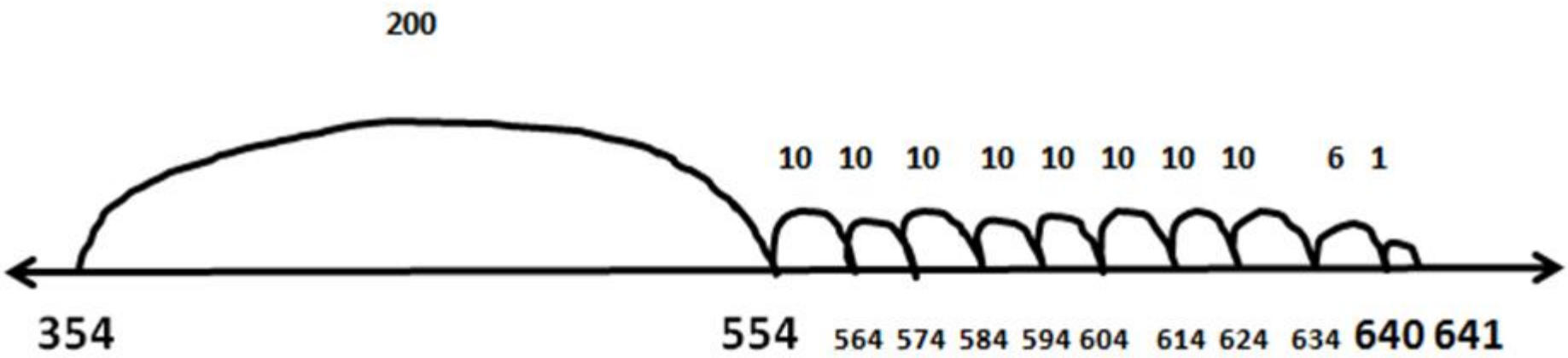


FRACTIONS!

Tablecloth

Open Number Lines

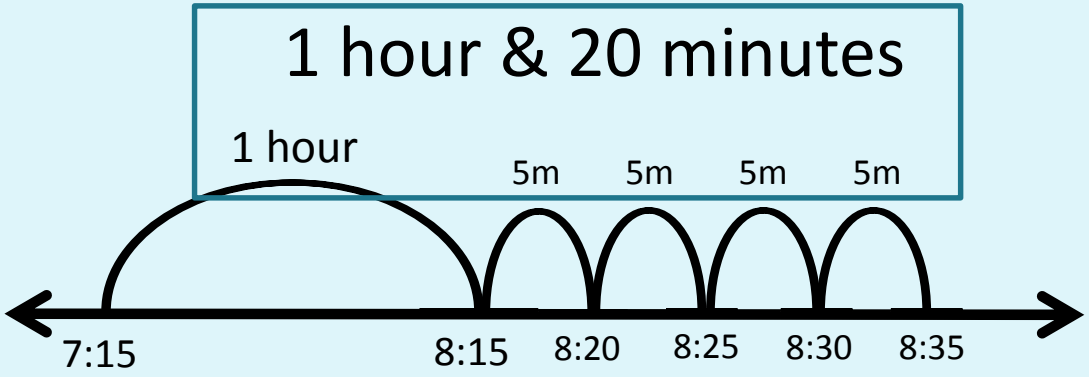
354 + 287 = ?



"I started at 354 and jumped 200. I landed on 554. I then made 8 jumps of 10 and landed on 634. I then jumped 6 to land on 640. Then I jumped 1 more and landed on 641. 354 + 287 = 641"

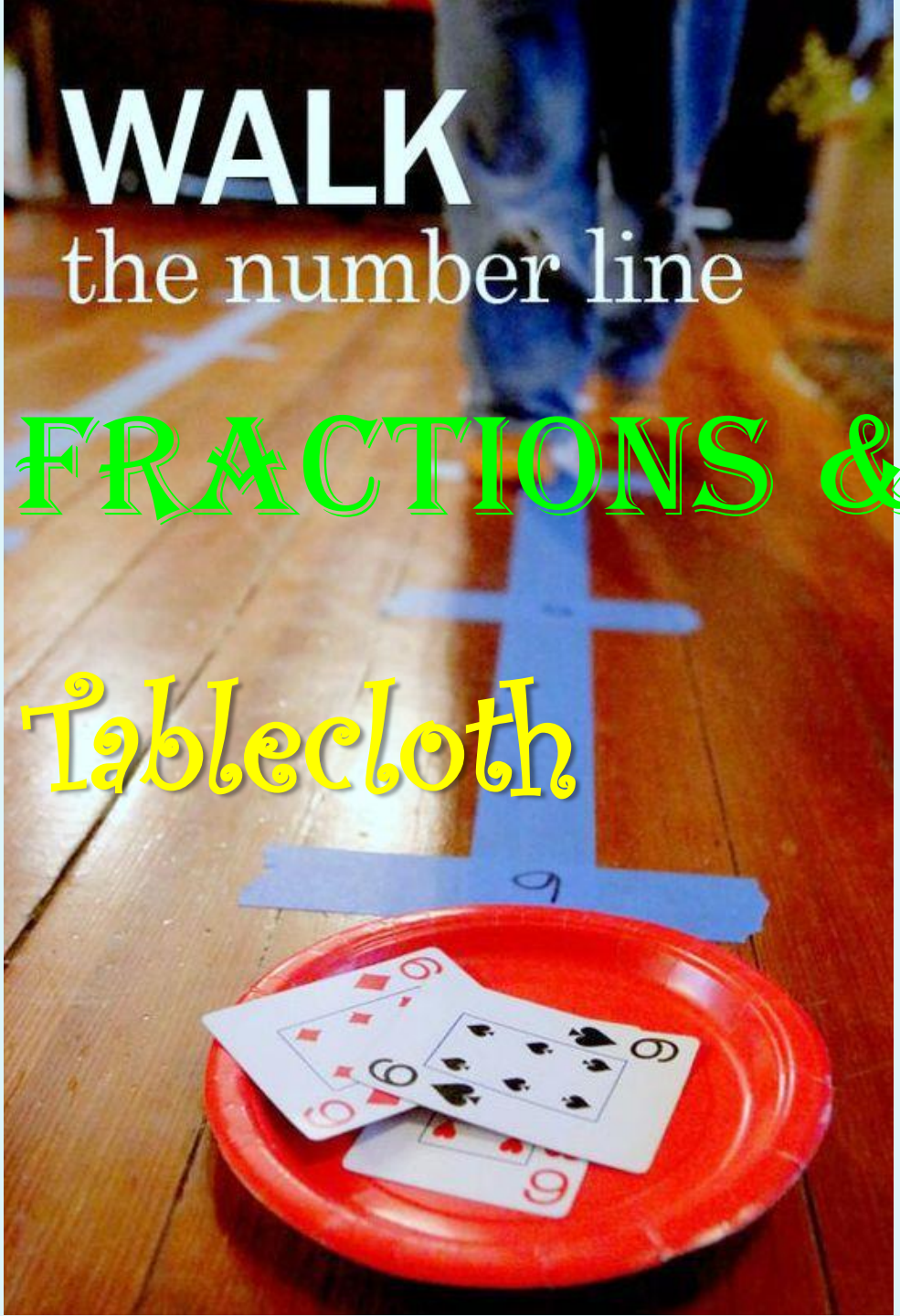
Open Number Lines & Elapsed Time

Mary and Gail went to Math Counts at 7:15. It was over 1 hour and 20 minutes later. What time was it over?



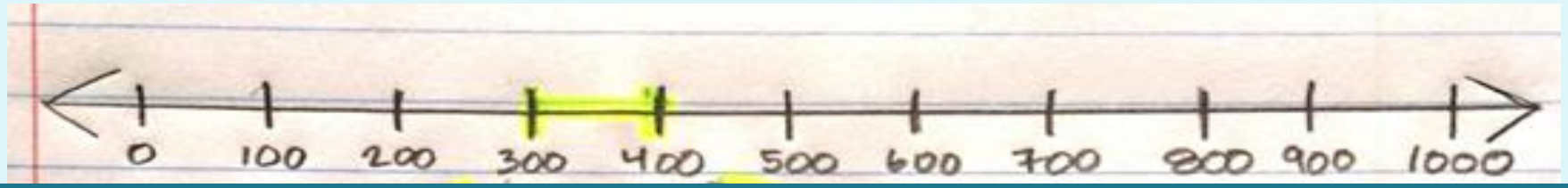
Math Counts was over at 8:35.

FRACTIONS & DECIMALS!



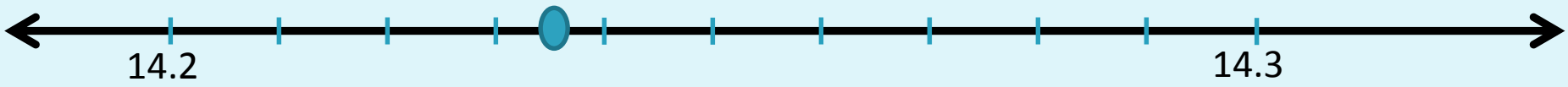
Tablecloth

Zooming In On A Number Line



Open Number Lines & Rounding

Round 14.235 to the nearest tenth.



Students recognize that the possible answer must be in tenths thus, it is either 14.2 or 14.3. They then identify that 14.235 is closer to 14.2 (14.20) than to 14.3 (14.30).

"It is only when you build from within that you really understand something. If children don't build from within and you just try to explain it to a child then it's not really learned. It is only rote, and that's not really understanding."

Ann Badeau

Second Grade Teacher

Children's Mathematics Cognitively Guided Instruction, Thomas Carpenter, Elizabeth Fennema, Megan Loef Franke, Linda Levi, Susan Empson.

Jump on Number Lines

Post-it notes - Comments and Questions

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Thank you!