

Hi Parents!

I'm so glad you're checking out these flashcards! As you look through them, you'll notice that they look a bit different from your typical flashcards. These include images of quantities in ten-frames and on number lines. There is LOTS of research about how important it is for students to use models and images as they develop fact fluency, which is one of the main goals of math in Kindergarten - 2nd Grade.

What is fluency? It is the ability to use strategies to flexibly and efficiently compute an answer. It is built from memory rather than by rote memorization drills.

Fluency standards:

- End of Kindergarten: add and subtract within 10, must be fluent within 5
- End of 1st grade: add within 100 using models, drawings, or other mental strategies, must be fluent within 10
- End of 2nd grade: add and subtract within 1000 using models, drawings, and other strategies based on place value, fluently add and subtract within 20 using mental strategies

What can you do to support number sense and fluency at home? Ditch the traditional flashcards and try these conceptual ones instead! Also, play games! Here are just a few: Fumble, Splat!, Shut the Box, Double Shutter, I Sea 10, 4-Way Countdown, Target, and Salute. For more info on games, go here:

<https://drive.google.com/file/d/1QYgGYFFYMTFhxBL4Q1lakgvNYxJHjGum/view>

Directions for Printing:

These were designed to be printed on Avery 5371 business cards, but can also be printed on plain card stock. Be sure to select pages 2-19 and print two-sided.

You'll notice a label in the top left corner of every page. This tells you the type of strategy on that page as well as whether it's the front or back.

Strategies included in this Subtraction Within 10 document:

Count Back (-1)

Count Back (-2)

Count Back (-3)

Take All (a number minus itself)

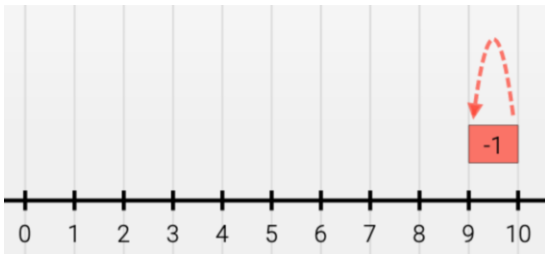
Take Half (an even number minus half; ex: $4-2=2$, $8-4=4$)

Break 5 (combinations of 5)

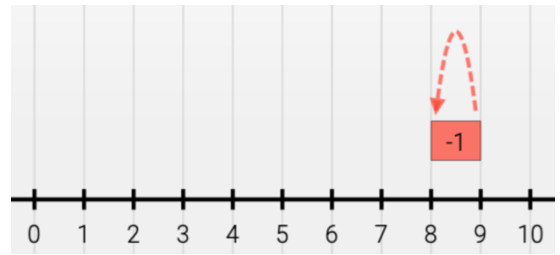
Break 10 (combinations of 10)

Neighbor Facts (numbers that are 1 or 2 away from each other)

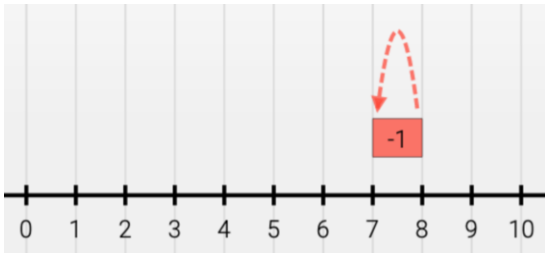
Leftovers



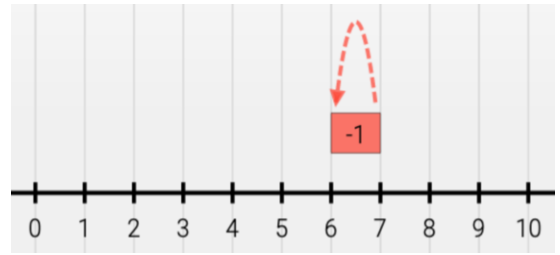
$$10 - 1$$



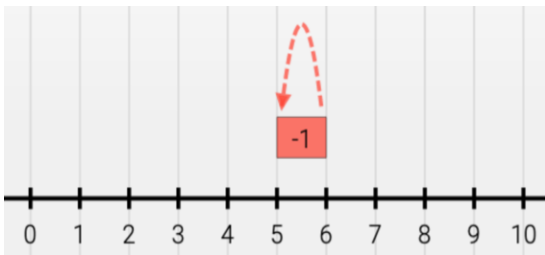
$$9 - 1$$



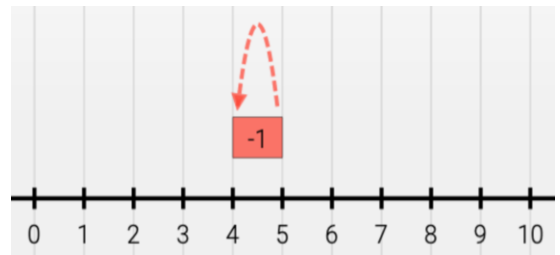
$$8 - 1$$



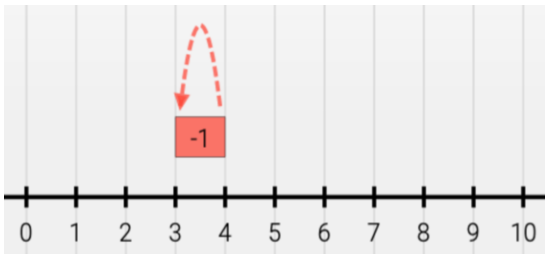
$$7 - 1$$



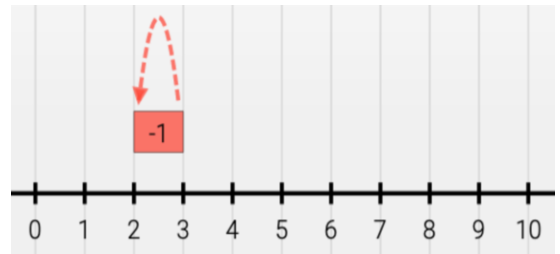
$$6 - 1$$



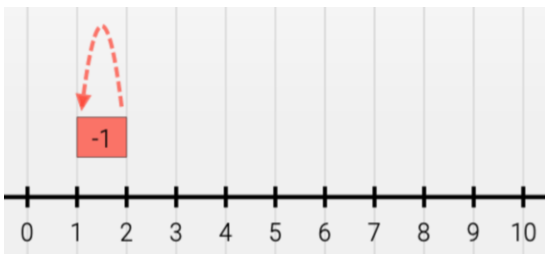
$$5 - 1$$



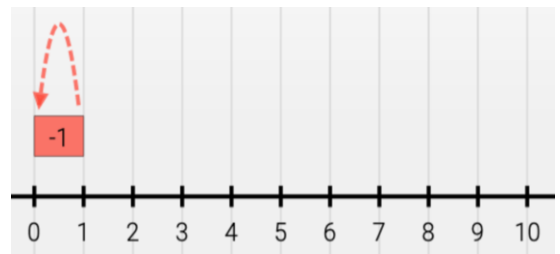
$$4 - 1$$



$$3 - 1$$



$$2 - 1$$



$$1 - 1$$

$$9 - 1 = 8$$

$$10 - 1 = 9$$

$$7 - 1 = 6$$

$$8 - 1 = 7$$

$$5 - 1 = 4$$

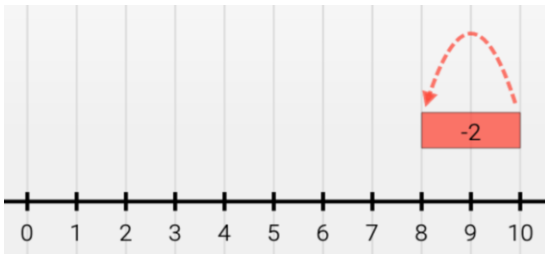
$$6 - 1 = 5$$

$$3 - 1 = 2$$

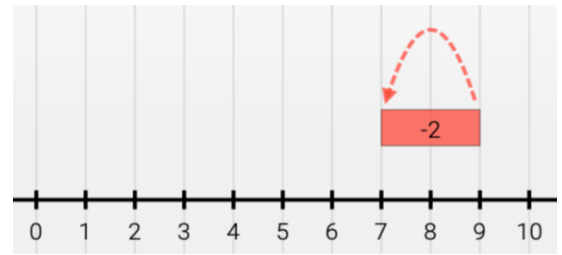
$$4 - 1 = 3$$

$$1 - 1 = 0$$

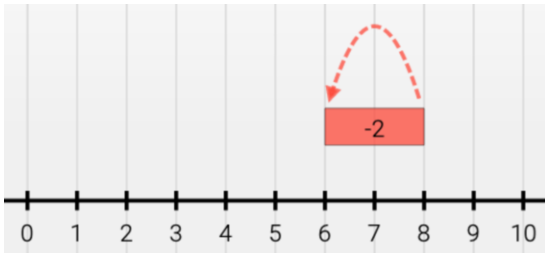
$$2 - 1 = 1$$



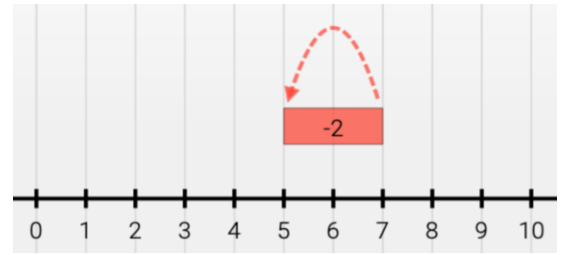
$$10 - 2$$



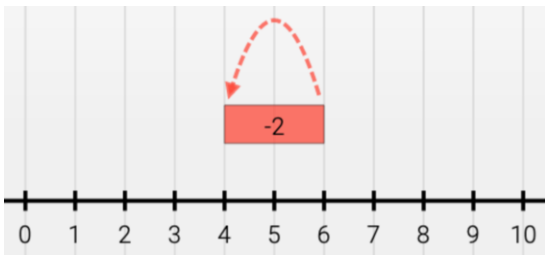
$$9 - 2$$



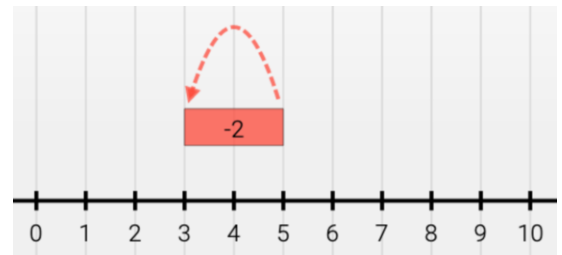
$$8 - 2$$



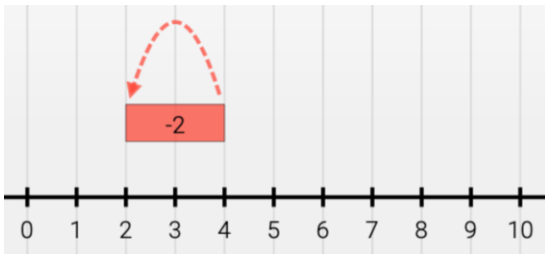
$$7 - 2$$



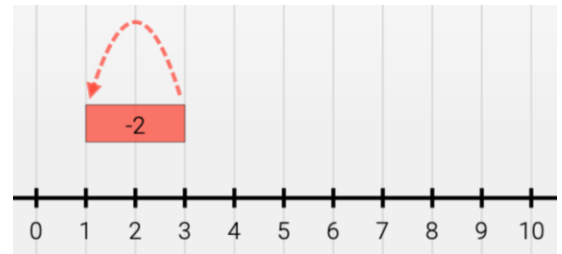
$$6 - 2$$



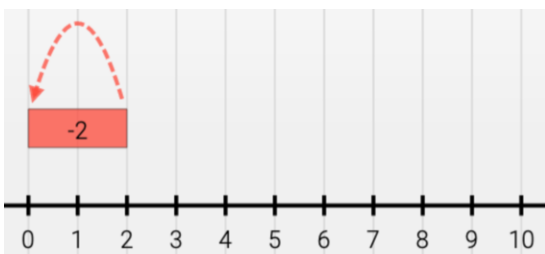
$$5 - 2$$



$$4 - 2$$



$$3 - 2$$



$$2 - 2$$

$$9 - 2 = 7$$

$$10 - 2 = 8$$

$$7 - 2 = 5$$

$$8 - 2 = 6$$

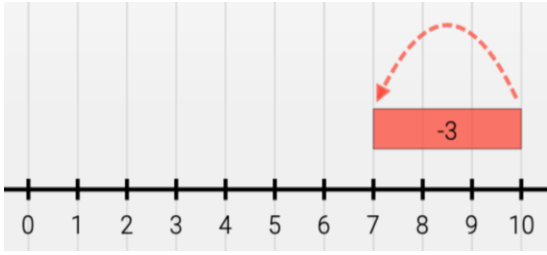
$$5 - 2 = 3$$

$$6 - 2 = 4$$

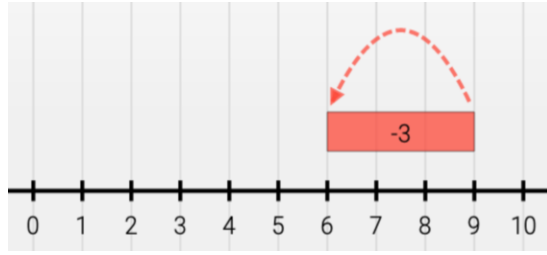
$$3 - 2 = 1$$

$$4 - 2 = 2$$

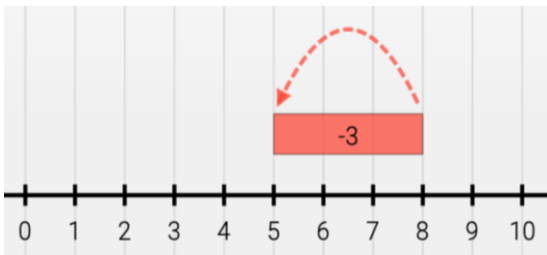
$$2 - 2 = 0$$



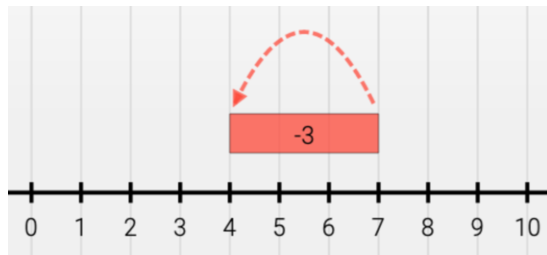
$10 - 3$



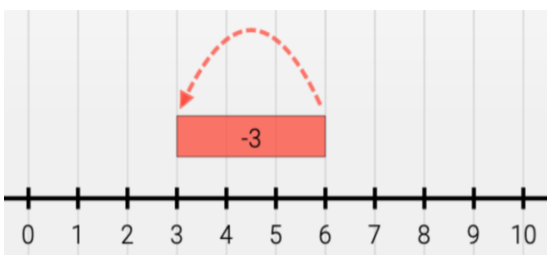
$9 - 3$



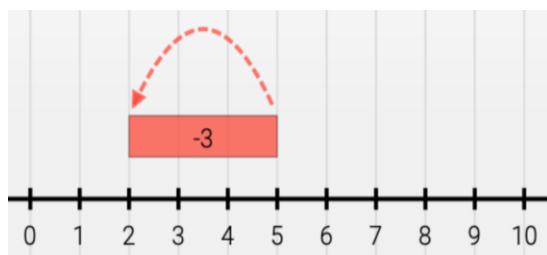
$8 - 3$



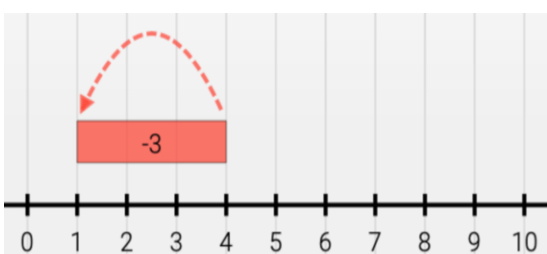
$7 - 3$



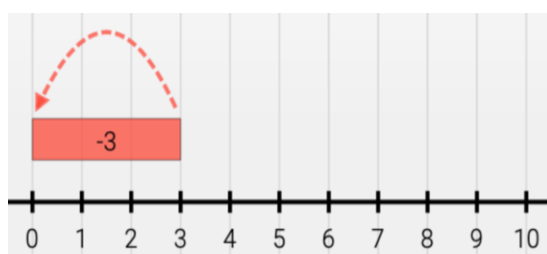
$6 - 3$



$5 - 3$



$4 - 3$



$3 - 3$

$$9 - 3 = 6$$

$$10 - 3 = 7$$

$$7 - 3 = 4$$

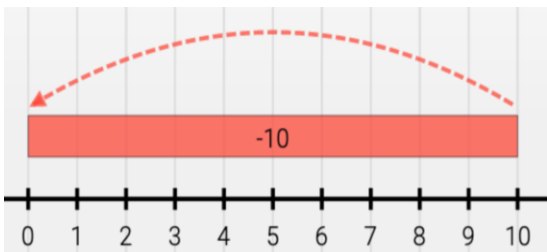
$$8 - 3 = 5$$

$$5 - 3 = 2$$

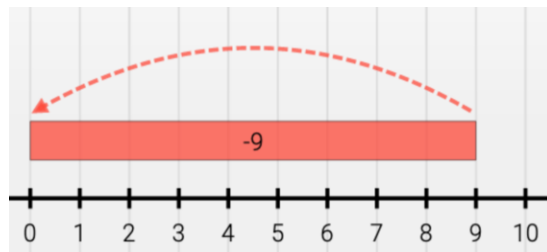
$$6 - 3 = 3$$

$$3 - 3 = 0$$

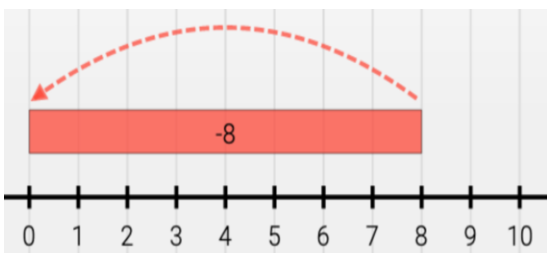
$$4 - 3 = 1$$



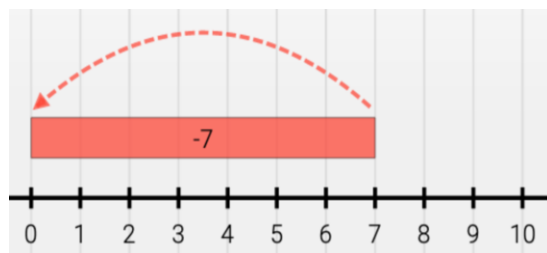
$$10 - 10$$



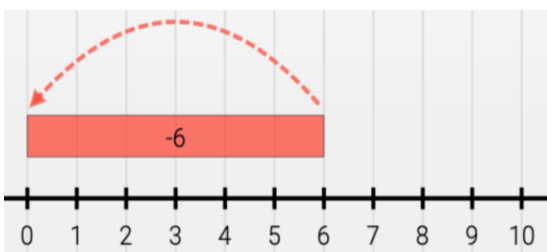
$$9 - 9$$



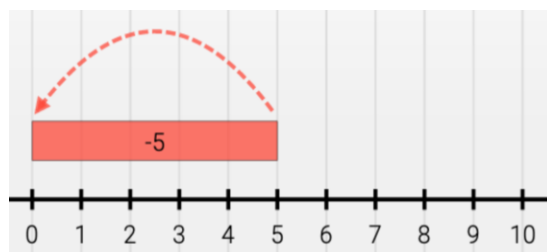
$$8 - 8$$



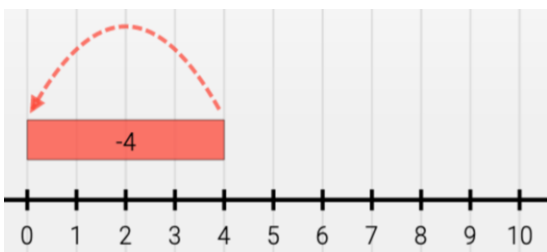
$$7 - 7$$



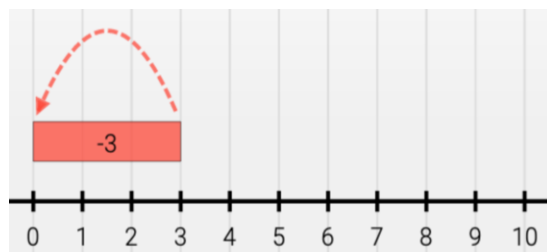
$$6 - 6$$



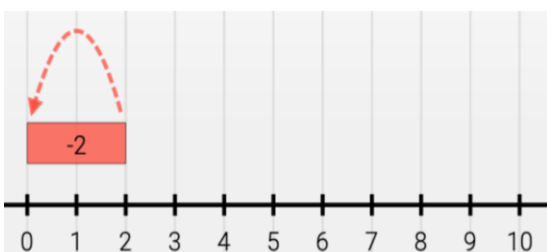
$$5 - 5$$



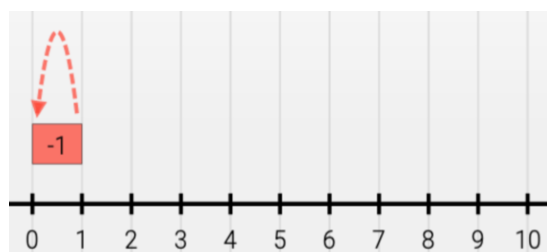
$$4 - 4$$



$$3 - 3$$



$$2 - 2$$



$$1 - 1$$

$$9 - 9 = 0$$

$$10 - 10 = 0$$

$$7 - 7 = 0$$

$$8 - 8 = 0$$

$$5 - 5 = 0$$

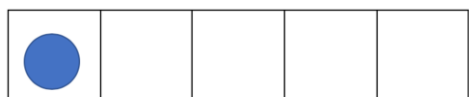
$$6 - 6 = 0$$

$$3 - 3 = 0$$

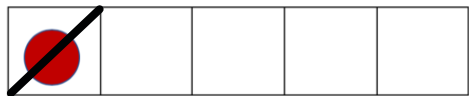
$$4 - 4 = 0$$

$$1 - 1 = 0$$

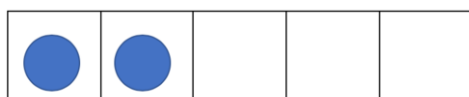
$$2 - 2 = 0$$



-



$$2 - 1$$



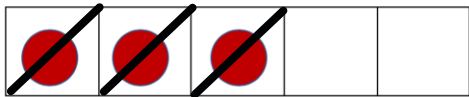
-



$$4 - 2$$



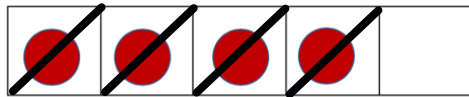
-



$$6 - 3$$



-



$$8 - 4$$



-



$$10 - 5$$

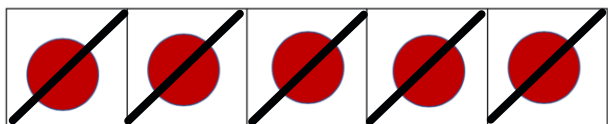
$$4 - 2 = 2$$

$$2 - 1 = 1$$

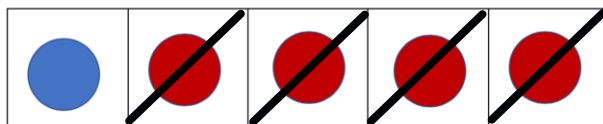
$$8 - 4 = 4$$

$$6 - 3 = 3$$

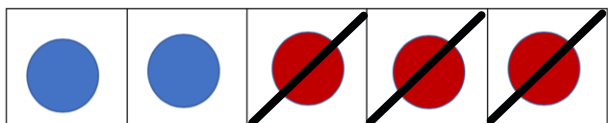
$$10 - 5 = 5$$



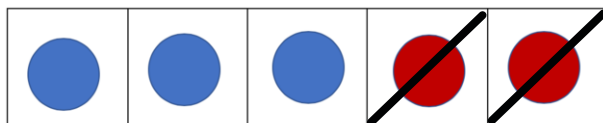
$5 - 5$



$5 - 4$



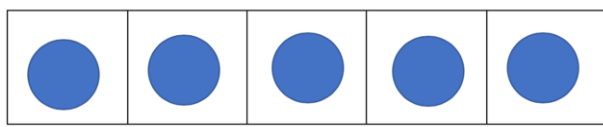
$5 - 3$



$5 - 2$



$5 - 1$



$5 - 0$

$$5 - 4 = 1$$

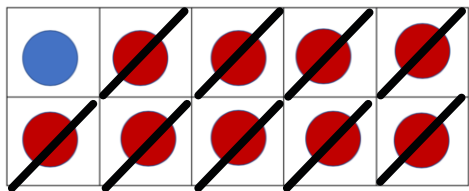
$$5 - 5 = 0$$

$$5 - 2 = 3$$

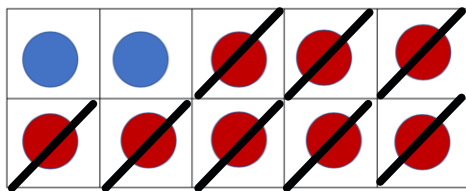
$$5 - 3 = 2$$

$$5 - 0 = 5$$

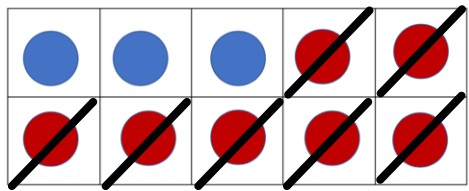
$$5 - 1 = 4$$



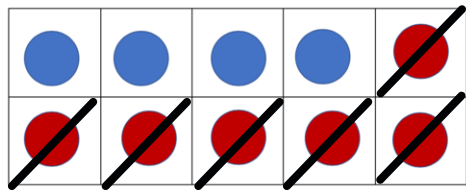
10 - 9



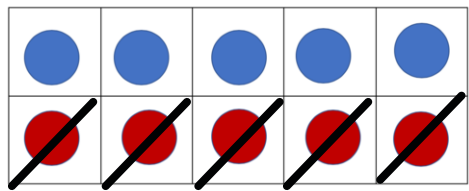
10 - 8



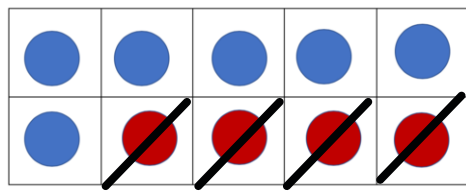
10 - 7



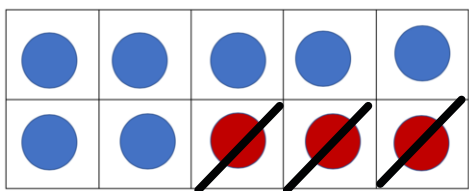
10 - 6



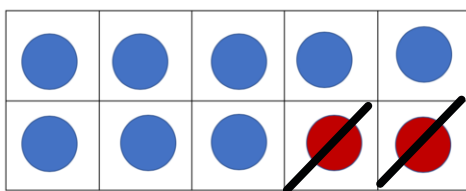
10 - 5



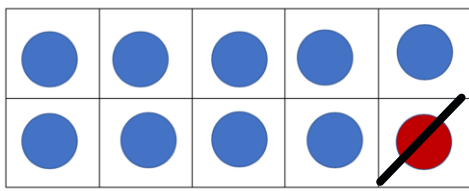
10 - 4



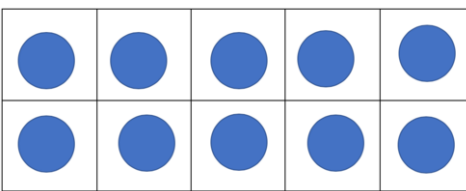
10 - 3



10 - 2



10 - 1



10 - 0

$$10 - 8 = 2$$

$$10 - 9 = 1$$

$$10 - 6 = 4$$

$$10 - 7 = 3$$

$$10 - 4 = 6$$

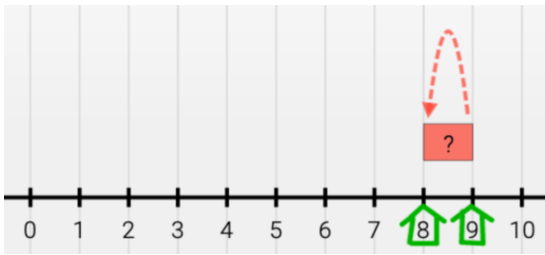
$$10 - 5 = 5$$

$$10 - 2 = 8$$

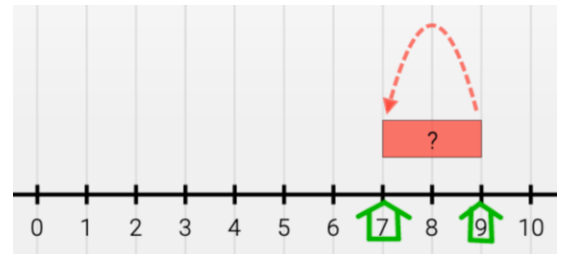
$$10 - 3 = 7$$

$$10 - 0 = 10$$

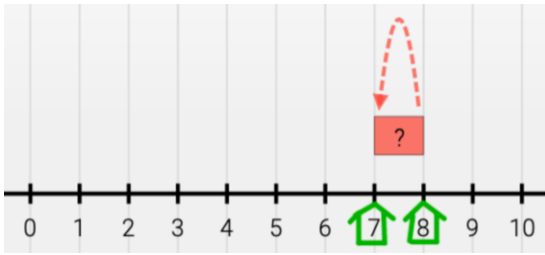
$$10 - 1 = 9$$



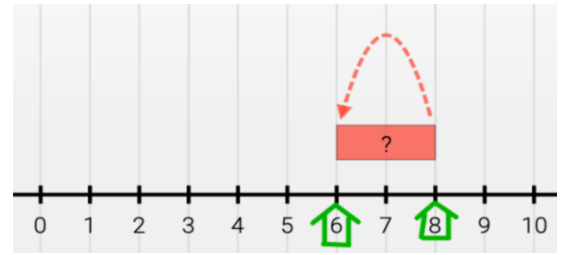
$$9 - 8$$



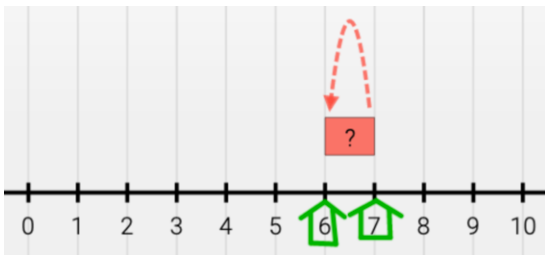
$$9 - 7$$



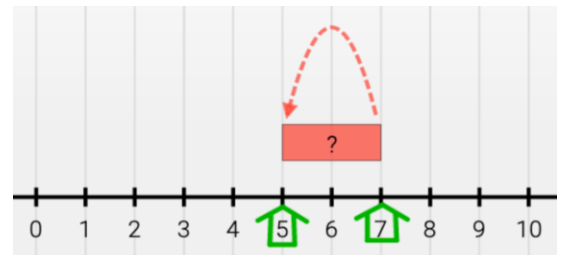
$$8 - 7$$



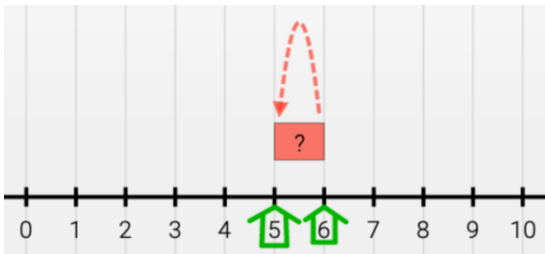
$$8 - 6$$



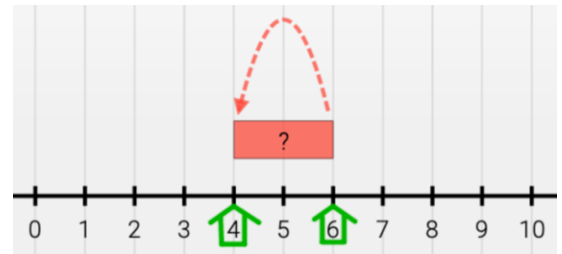
$$7 - 6$$



$$7 - 5$$



$$6 - 5$$



$$6 - 4$$

These are "Neighbor Facts". They are numbers that are 1 or 2 spaces apart on the number line. Think of them as houses that are 1 or 2 apart on your street.

$$9 - 7 = 2$$

$$9 - 8 = 1$$

$$8 - 6 = 2$$

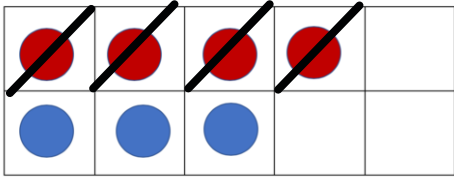
$$8 - 7 = 1$$

$$7 - 5 = 2$$

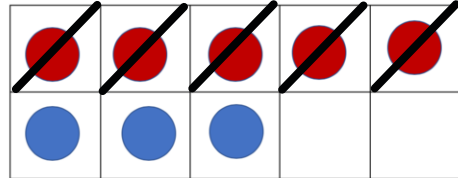
$$7 - 6 = 1$$

$$6 - 4 = 2$$

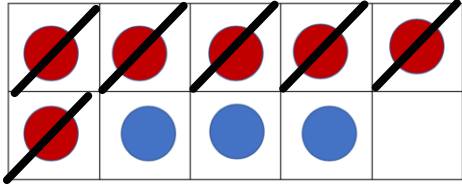
$$6 - 5 = 1$$



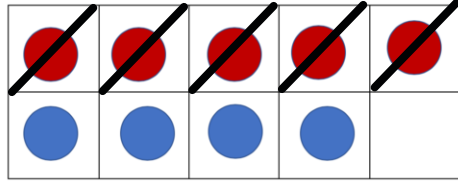
$$7 - 4$$



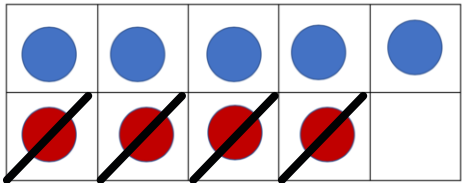
$$8 - 5$$



$$9 - 6$$



$$9 - 5$$



$$9 - 4$$

$$8 - 5 = 3$$

$$7 - 4 = 3$$

$$9 - 5 = 4$$

$$9 - 6 = 3$$

$$9 - 4 = 5$$