

Useful websites

www.purplemash.co.uk

www.educationcity.co.uk

www.bbc.co.uk/bitesize/ks1/maths

www.ictgames.com

www.topmarks.co.uk/mathsgame

www.mathschamps.co.uk

www.nrich.org.uk

www.oxfordowl.co.uk - free e-books

<http://www.iseemaths.com/celebrating-maths-project/>

Padnell Infant School

Whole School Visual

Calculation Policy

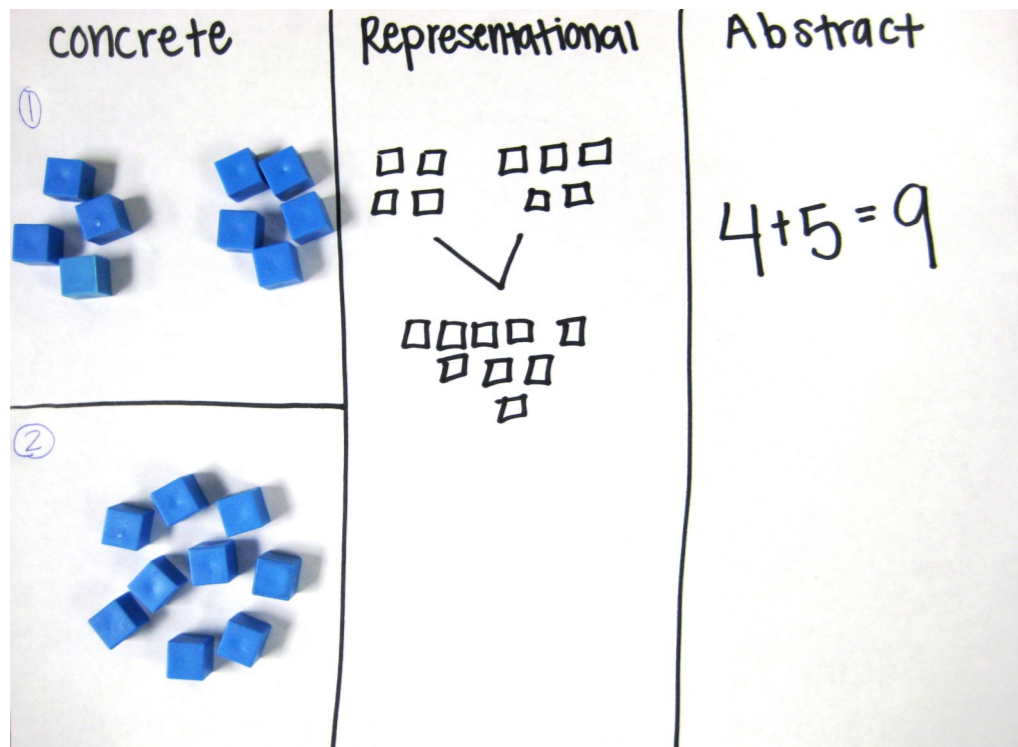
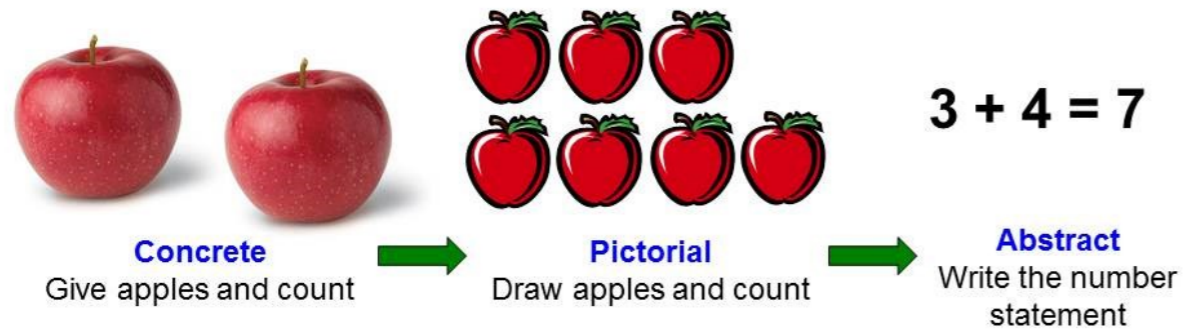
Parent Workshop

September 2017



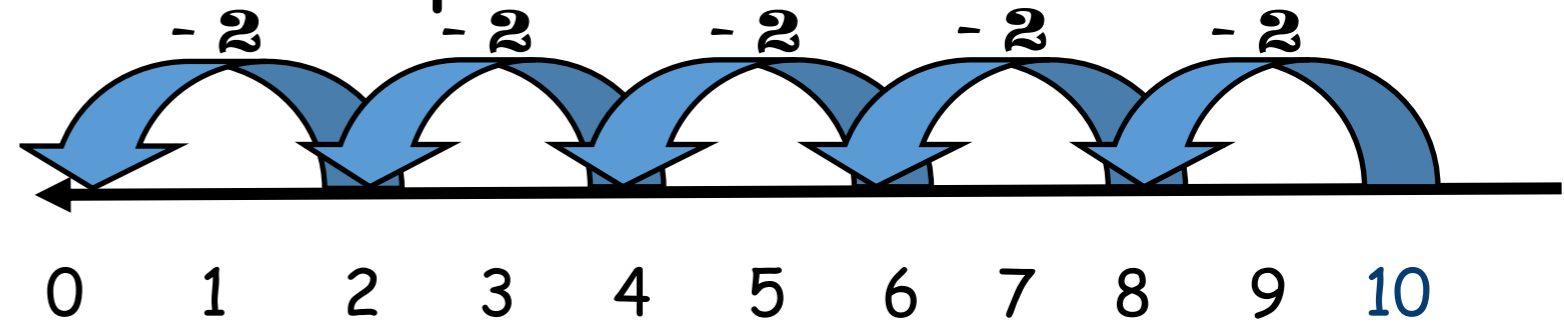
Concrete- Pictorial- Abstract

What does it mean?



Division

3. Repeated subtraction



$$10 \div 2 = 5$$

10 divided by 2 equals 5 jumps.

Key Vocabulary:

Addition

add, more, plus, and, make, altogether, total, equal to, equals, double, most, count on, number line, sum, tens, ones/units, partition, addition, column, greater than, less than

Subtraction

equal to, take, take away, less, minus, subtract, leaves, distance between, how many more, how many fewer / less than, most, least, count back, how many left, how much less is_?

Multiplication

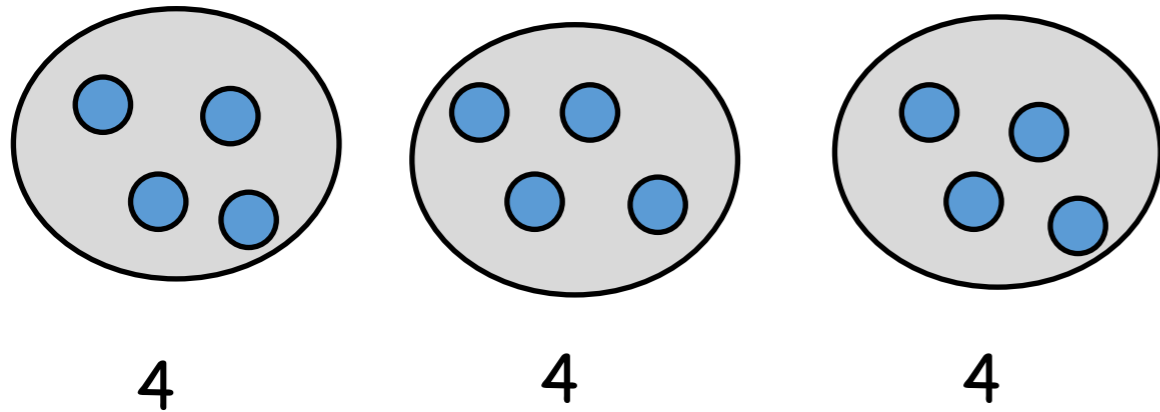
Groups of, lots of, times, multiply, altogether, count, multiplied by, repeated addition, column, row, commutative, sets of, equal groups, partition, multiple, product, tens, ones/units, value, total, inverse

Division

Divide, share, share equally, group, equal groups, lots of, array, divide, divided by, division, grouping, number line, left, left over, remainder

Division

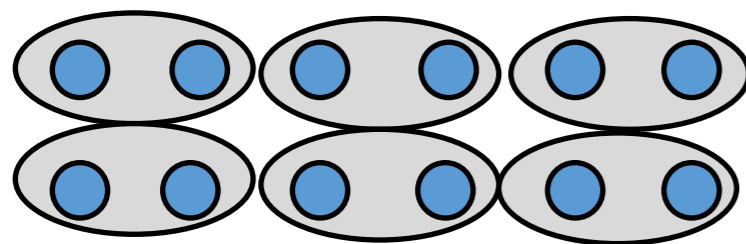
1. Sharing



$$12 \div 3 = 4$$

12 divided by 3 equals 4.

2. Grouping

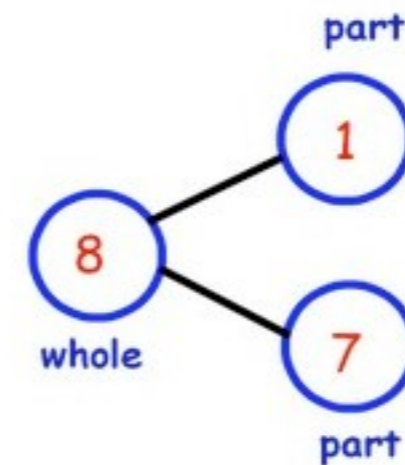
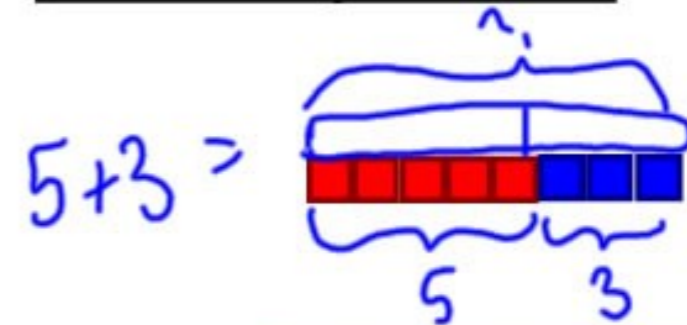
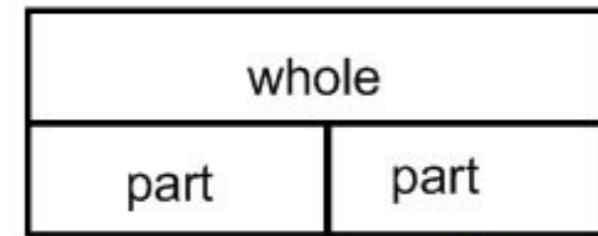


$$12 \div 2 = 6$$

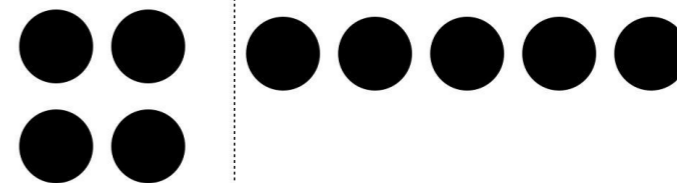
How many groups of 2 can I fit into 12? Answer: 6

Part- Part- Whole

Multiple Representation

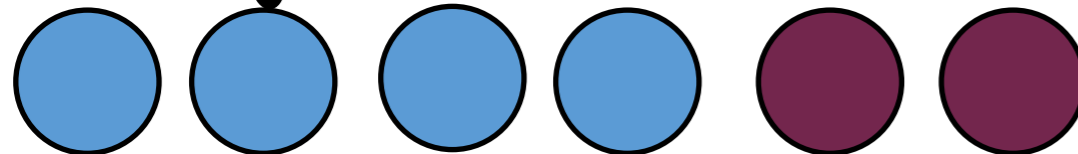


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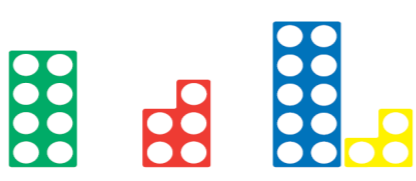


Addition

1. Objects

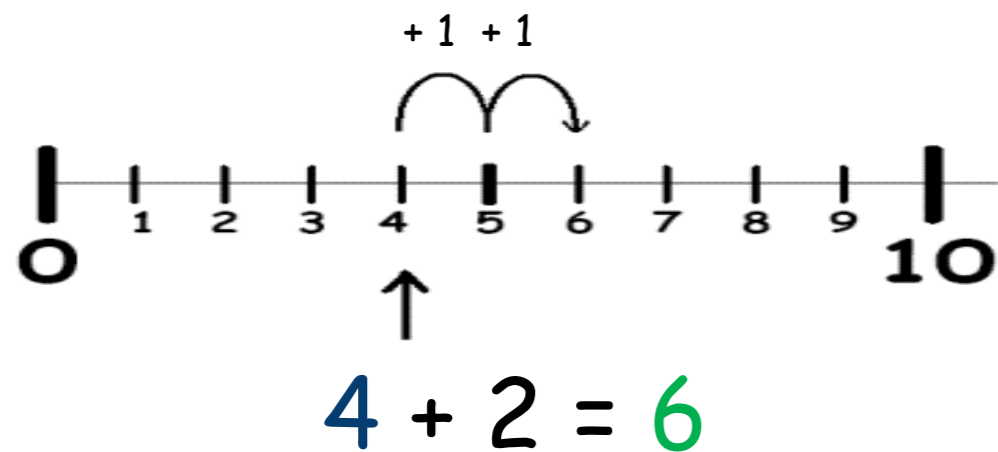


$4 + 2 = 6$



$8 + 5 = 13$

2. Counting on

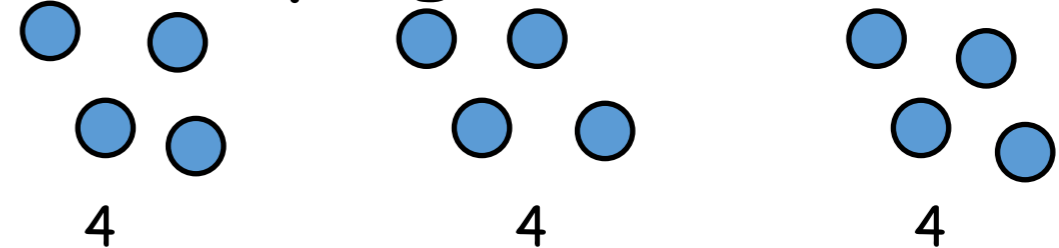


3. Number Bonds

$$\begin{array}{r} 8 + 4 + 2 = 14 \\ \swarrow \quad \searrow \\ 10 \quad 4 \end{array}$$

Multiplication

1. Grouping



$$4 \times 3 = 12$$

4 times 3 means 4, 3 times.


Which gives 3 groups of 4!

2. Repeated Addition

$$4 \times 3 = 12$$

$$4 + 4 + 4 = 12$$

3. Arrays



$4 \times 3 = 12$

$3 \times 4 = 12$

Subtraction cont'd

8. Partitioning

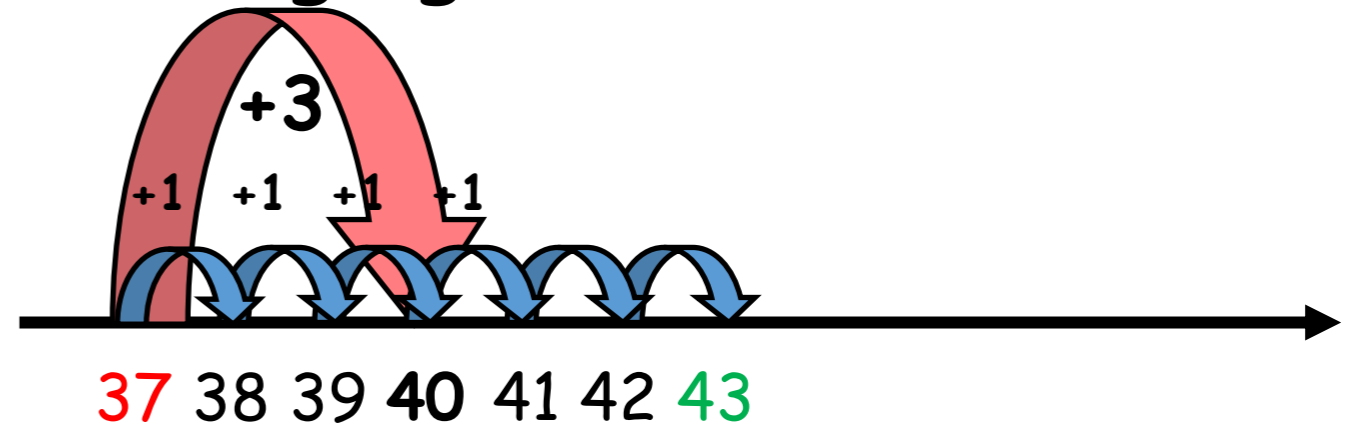
$$84 - 33 = 51$$

Tens $80 - 30 = 50$

Ones $4 - 3 = 1$

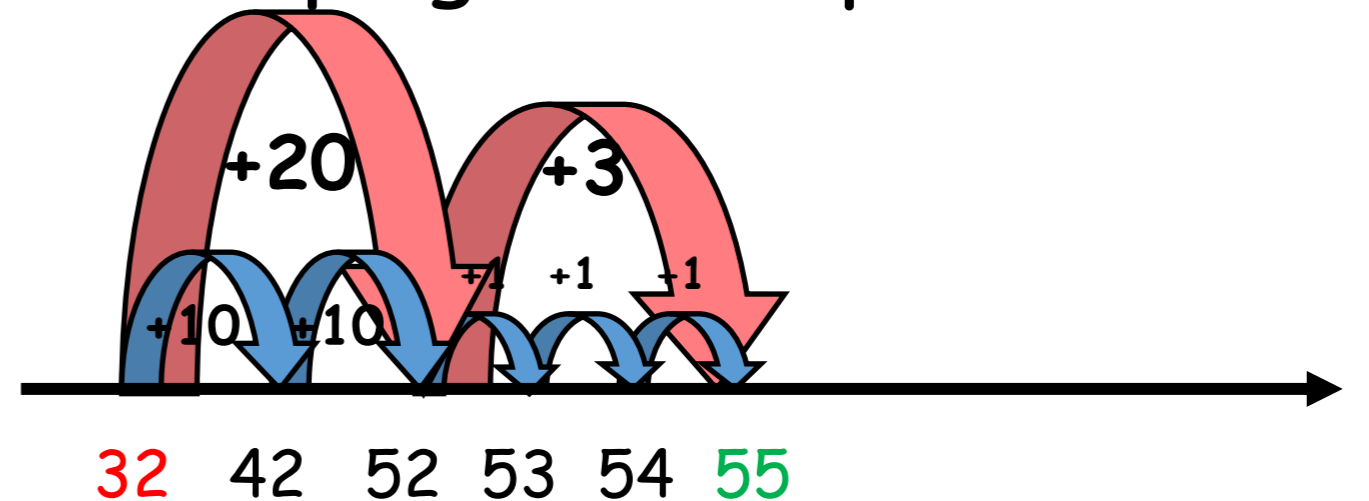
$$50 + 1 = 51$$

4. Bridging the ten



$$37 + 6 = 43$$

5. Jumping in multiples



$$32 + 23 = 55$$

Addition cont'd

6. Partitioning

$$45 + 23 = 68$$

Tens $40 + 20 = 60$

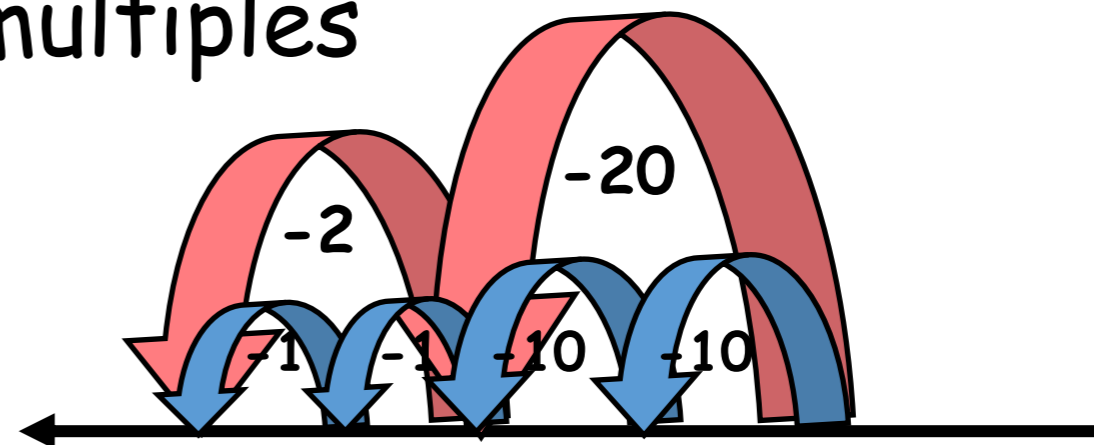
Ones $5 + 3 = \underline{8}$

$$68$$

7. Column Addition

$$\begin{array}{r} \text{HTO} \\ 84 \\ + 57 \\ \hline 141 \\ \hline 1 \end{array}$$

6. Jumping backwards in multiples



62 63 64 74 84

$$84 - 22 = 62$$

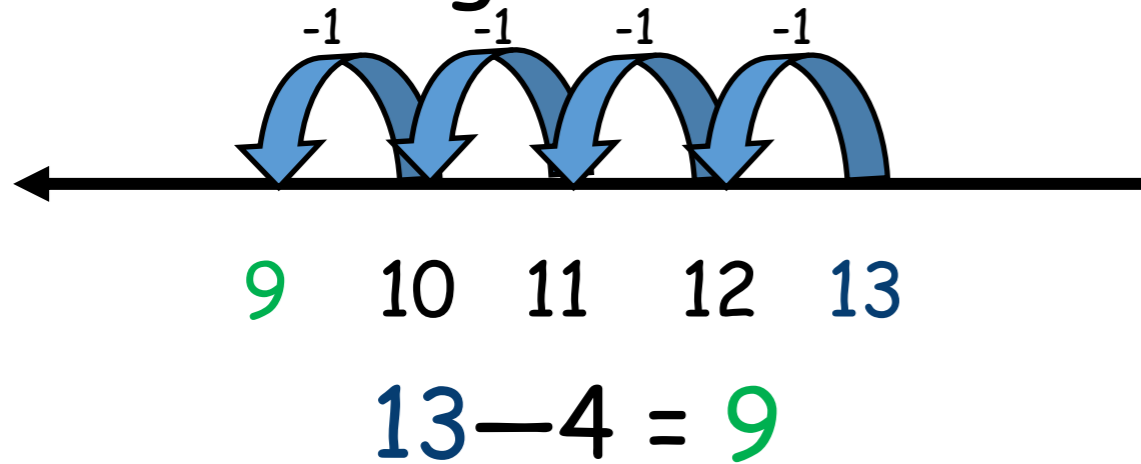
7. Column subtraction

H T O

$$\begin{array}{r} 84 \\ - 33 \\ \hline 51 \end{array}$$

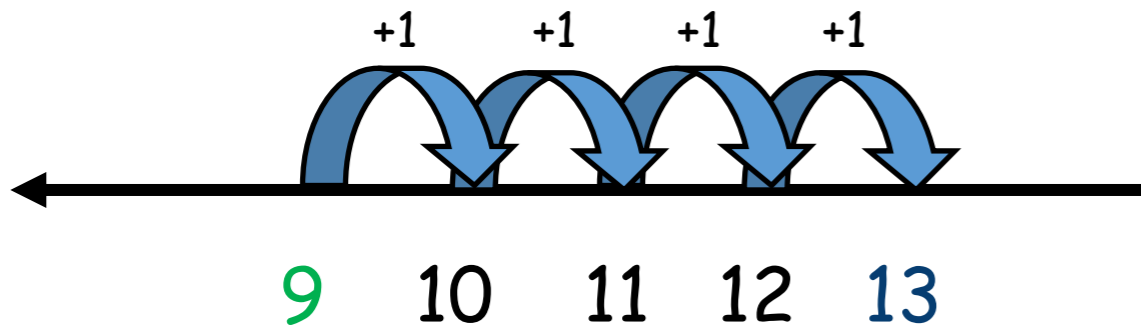
Subtraction

3. Counting backwards



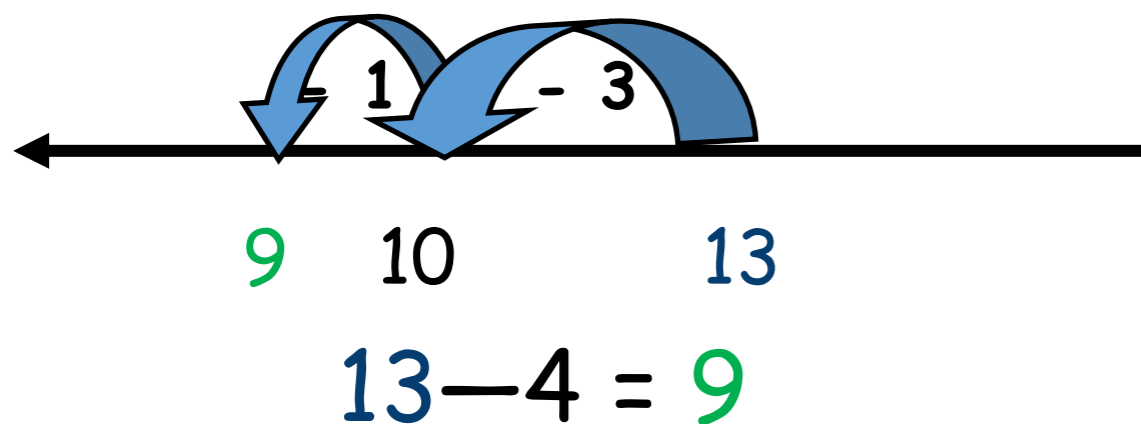
What do I get if I take away 4 from 13? Answer: 9

4. Counting on



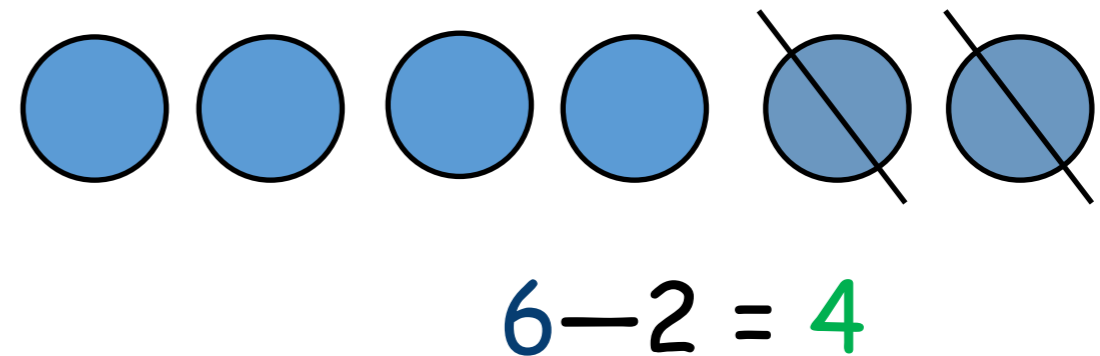
How many more is 13 than 9? What is the difference?

5. Nearest 10



Subtraction

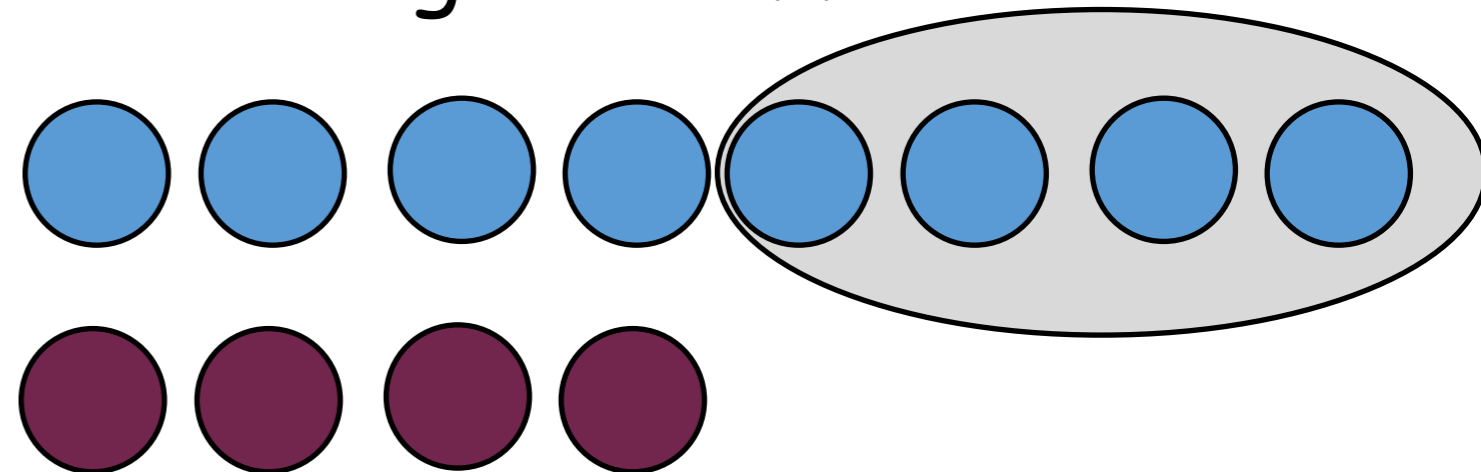
1. Objects



What do I get if I take away 2 from 6?

Answer: 4

2. Finding the difference



$$8 - 4 = 4$$

How many more is 8 than 4? Answer: 4