

Mathematics

Number Sense

Applying number bonds within 20 to add and subtract



OAK
NATIONAL
ACADEMY

Lesson Agenda

Star Words



Using number bonds and number lines



Practise



Independent Task

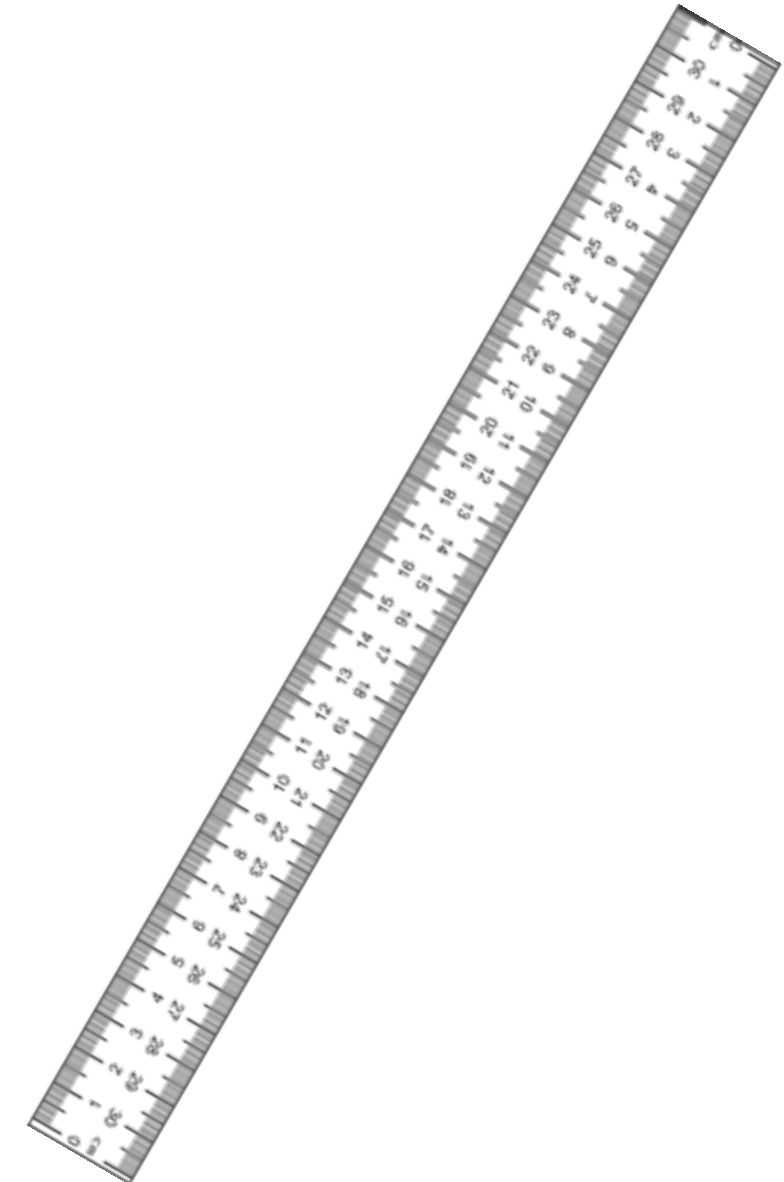
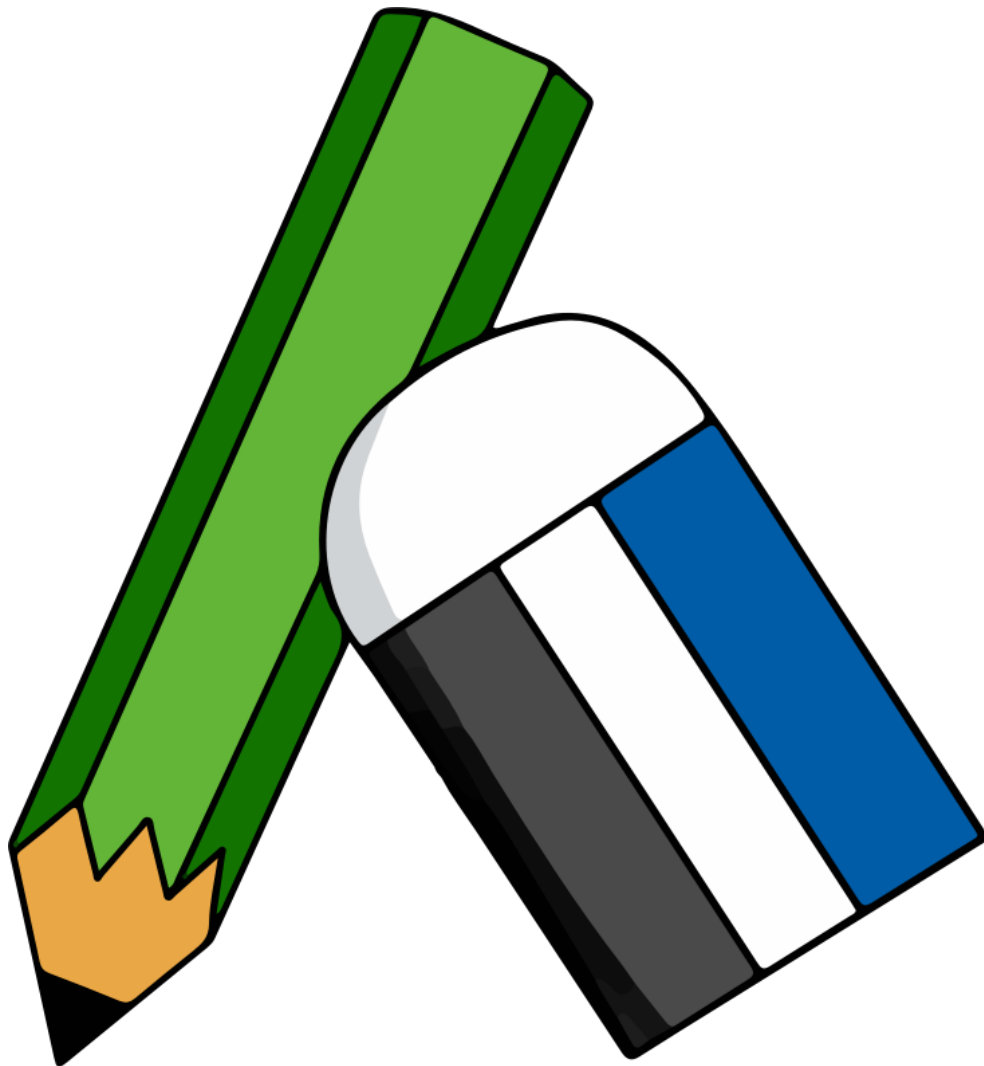


You will need...

Pencil

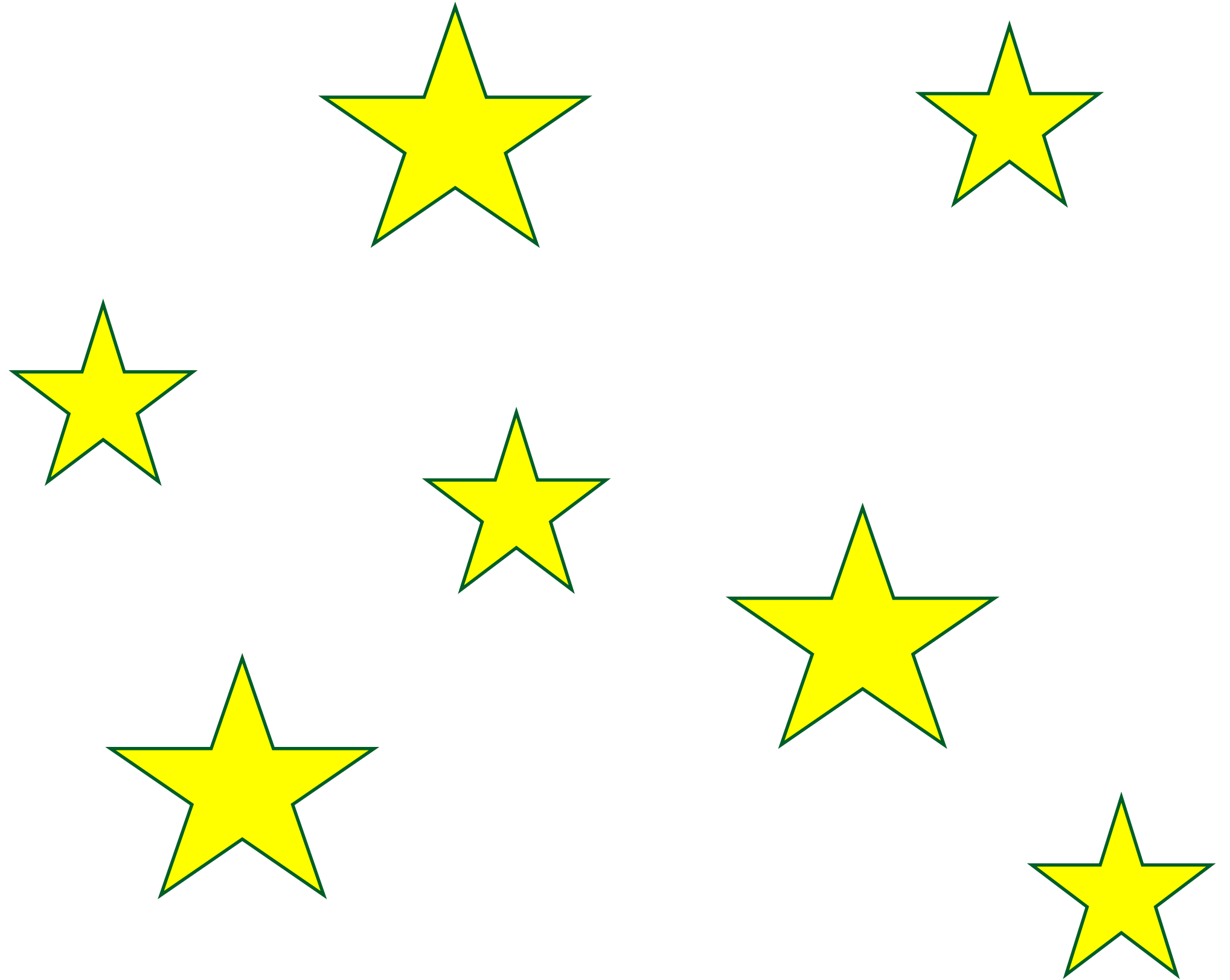
Paper

Ruler



Star Words

- calculation strategy
- partition
- number bond
- make ten
- regroup
- add
- plus
- subtract
- minus



Can we use our number bonds within 10 to calculate this mentally?

$$36 + 47$$

Which number bonds did I use?

$$3 + 4 = 7$$

$$6 + 7 = 13$$

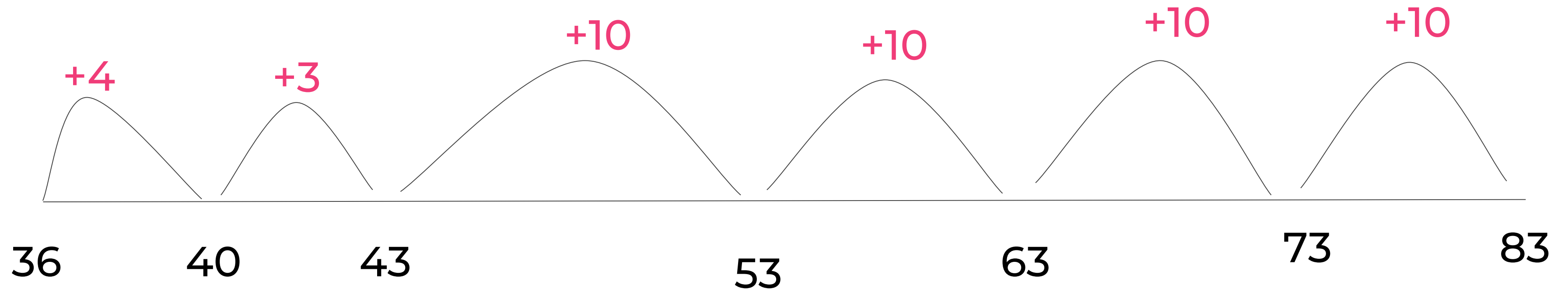
$$30 + 40 = 70$$

$$70 + 13 = 83$$



$$36 + 47 = 83$$

We can represent this calculation on a part-whole model with Dienes blocks and here on an empty number line:



II Can we use our number bonds within 10 to calculate this mentally?

$$83 - 47$$

Which number bonds did I use?

$$8 - 4 = 4$$

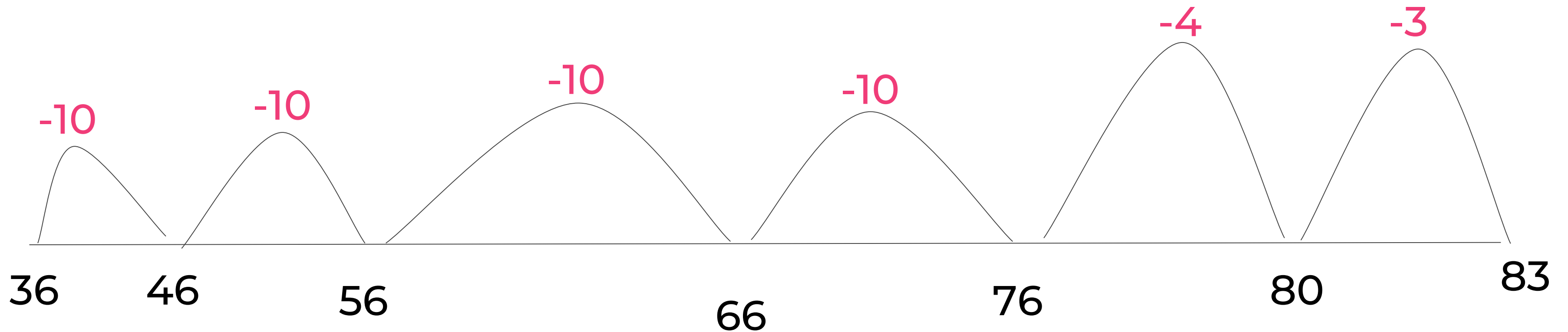
$$43 - 7 = 36$$

$$83 - 40 = 43$$



$$83 - 47 = 36$$

We can represent this calculation on a part-whole model with Dienes blocks and here on an empty number line:



⏸ Let's Explore- your turn

$$36 + 27$$

$$+ 44$$

$$65 - 17$$

$$58$$

$$54 - 26$$

$$47 + 38$$

$$83$$

1. Choose an addition or subtraction calculation

2. Use a number line and step by step, add or subtract by partitioning the numbers

$$- 46$$



Using number bonds to 20:

$$36 + 47 =$$

$$3 + 4 = 7$$

$$30 + 40 = 70$$

$$6 + 7 = 13$$

$$70 + 13 =$$
$$83$$



Using number bonds - my turn

$$72 - 34 =$$

$$12 + 49 =$$

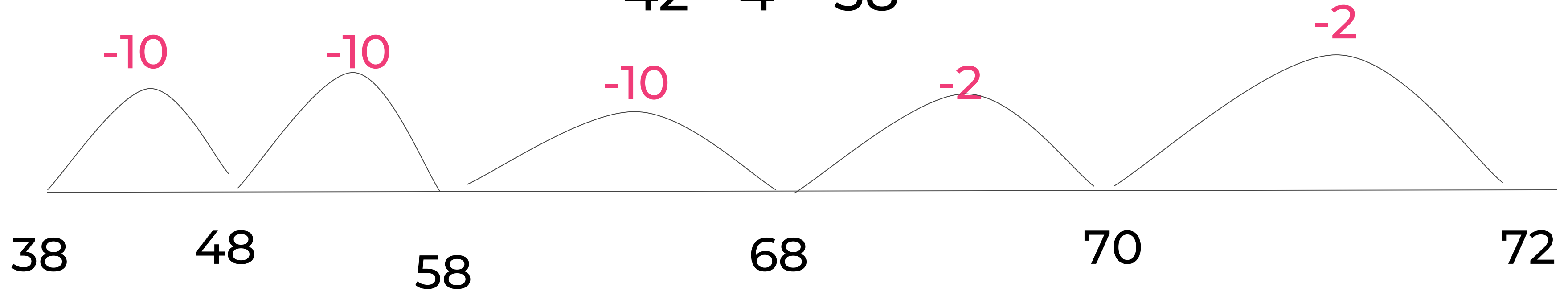
$$84 - 45 =$$

$$24 + 59 =$$

$$7 - 3 = 4$$

$$70 - 30 = 40$$

$$42 - 4 = 38$$





Independent Task

Using number bonds - your turn

$$52 - 14 =$$

$$12 + 49 =$$

$$84 - 45 =$$

$$24 + 59 =$$

Partition these equations and by using your number bonds to 20- solve them! Don't forget to draw your number line!





Independent Task

Using number bonds - your turn

$$52 - 14 =$$

$$12 + 49 =$$

$$84 - 45 =$$

$$24 + 59 =$$

$$5 - 1 = 4$$

$$50 - 10 = 40$$

$$42 - 4 = 38$$

$$1 + 4 = 5$$

$$10 + 40 = 50$$

$$2 + 9 = 11$$

$$50 + 11 = 61$$

$$8 - 4 = 4$$

$$80 - 40 = 40$$

$$44 - 5 = 39$$

$$2 + 5 = 7$$

$$20 + 50 = 70$$

$$4 + 9 = 13$$

$$70 + 13 = 83$$

