

Make sense of problems and persevere in solving them.

Mathematical Practice 1



When given a problem, I can make a plan, carry out my plan, and check my answer.

BEFORE...

Think about the problem.

Ask myself, "Which strategy will I use?"

Make a **plan** to solve the problem.



DURING...

Stick to it!

Ask myself, "Does this make sense?"

Change my plan if it isn't working out.



AFTER...

CHECK my work.



Ask myself, "Is there another way to solve the problem?"

Reason abstractly and quantitatively.

Mathematical Practice 2



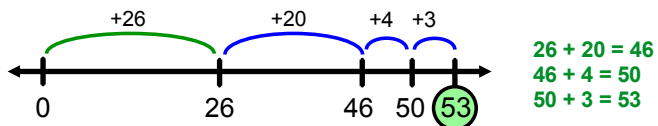
I can use numbers and words to help me make sense of problems.

Numbers to Words

$$26 + 27 = 53$$

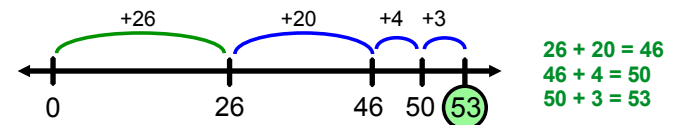


There are 26 boys and 27 girls on the playground.
How many children are on the playground?



Words to Numbers

There are 26 boys and 27 girls on the playground.
How many children are on the playground?



$$26 + 27 = 53$$

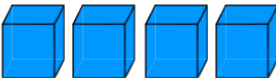
Construct viable arguments and critique the reasoning of others.

Mathematical Practice 3





I can explain my thinking and respond to the mathematical thinking of others.

I can **explain my strategy** using...

- objects, drawings, and actions 
- examples and non-examples
- contexts

I can **compare strategies** with others by...

- listening 
- asking useful questions 
- understanding mathematical connections between strategies

Model with mathematics.

Mathematical Practice 4



I can recognize math in everyday life and use math I know to solve problems.

I can use....

I can use take-away to find the difference between the number of crayons Jill and Rob have.

$$\begin{array}{r} 46 \\ - 23 \\ \hline 23 \end{array}$$

(Symbols)

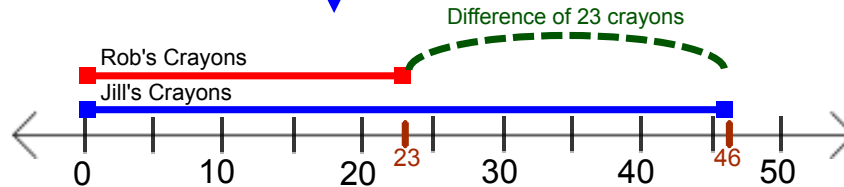
Rob has 23 crayons. Jill has 46 crayons. How many more crayons does Jill have than Rob?

(Objects)



(Words)

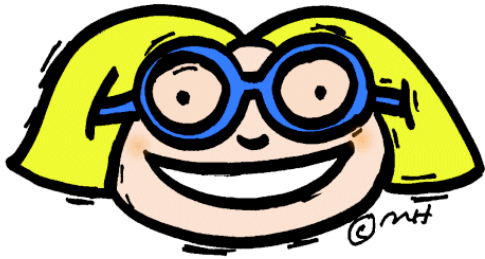
(Pictures)



...to solve everyday problems.

Use appropriate tools strategically.

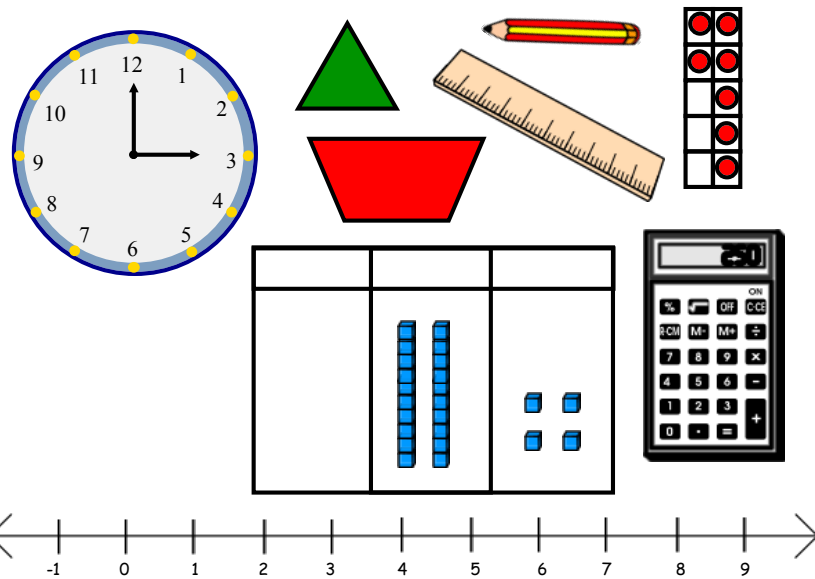
Mathematical Practice 5



I can use certain tools to help me explore and deepen my math understanding.



I have a math toolbox.



- I know **HOW** and **WHEN** to use math tools.
- I can reason: "Did the tool I used give me an answer that makes sense?"

Attend to precision.

Mathematical practice 6



I can be precise when solving problems and clear when I share my ideas.

Careful and clear mathematicians use...

symbols

PLUS: join EQUAL: the same as

$$23¢ + 52¢ = 75¢$$

units of measure:
CENTS

The diagram illustrates the mathematical equation $23¢ + 52¢ = 75¢$ with annotations. A blue dashed line connects the word "symbols" to the plus sign and the equals sign. Below this, "PLUS: join" and "EQUAL: the same as" are written in blue. An orange dashed line connects the cent symbols (¢) of all three numbers, with the text "units of measure: CENTS" written below it in orange.

- math vocabulary
- symbols that have meaning
- context labels
- units of measure
- calculations that are accurate and efficient

Look for and make use of structure.

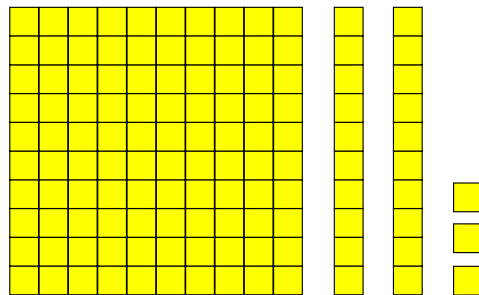
Mathematical Practice 7



I can see and understand how numbers and shapes are organized and put together as parts and wholes.

Numbers

For example:



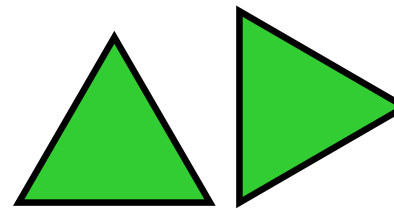
123

1 hundred, 2 tens, and 3 ones

Base Ten System

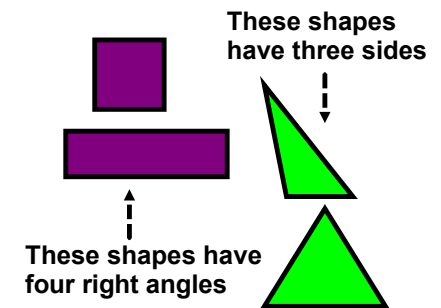
Shapes

For example:



These are the same!

Orientation



These shapes have four right angles

These shapes have three sides

Attributes

Look for and express regularity in repeated reasoning.

Mathematical Practice 8

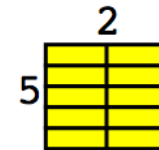


I can notice when calculations are repeated.

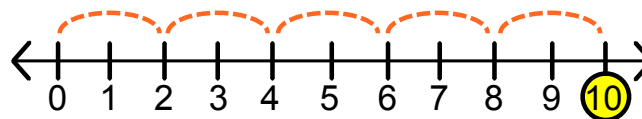
$$5 \times 2 = 10$$

$$2 + 2 + 2 + 2 + 2 = 10$$

I am adding 2 five times.



I am counting rows with 2 in each row five times.



I am making 5 hops of 2 on the number line.