

**3-5**

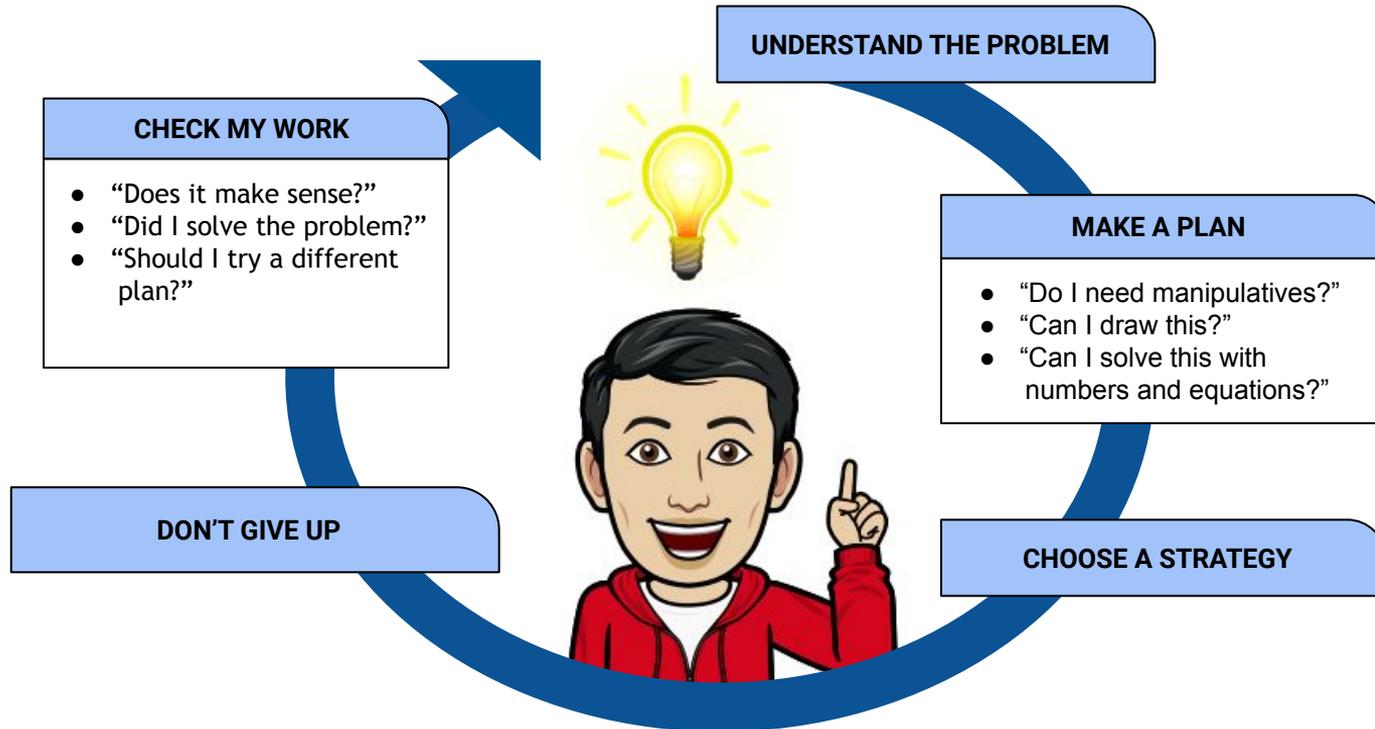
**SMP Posters**

# We Are MATHEMATICIANS



# We will make sense of problems and persevere as we solve them.

## Student Mathematical Practice 1



# We will reason abstractly and quantitatively.

## Student Mathematical Practice 2

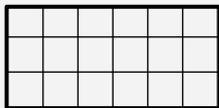
Zoe has 18 flowers that she wants to plant in pots. If she has six pots, how many flowers will she plant in each pot?



I can connect numbers and words to make sense of the problem.

$18 \text{ flowers} \div 6 \text{ pots} = 3 \text{ flowers in each pot}$

$$18 \div 6 = 3$$



# We will construct viable arguments and critique the reasoning of others.

## Student Mathematical Practice 3



During our math discussions, I will:

- Explain my thinking
- Listen to others' explanations
- Ask useful questions
- Compare strategies
- Analyze and make connections
- Justify conclusions
- Revise my thinking as needed

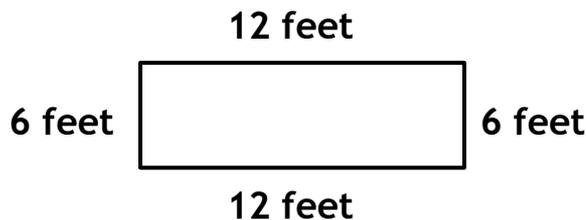
# We will model with mathematics.

## Student Mathematical Practice 4

I can mathematize by applying my math skills to solve a real life scenario that has meaning to me.

Your mom is letting you invite 18 friends to your birthday party. She wants everyone to sit at the same rectangular picnic table. Each person needs 2 feet of space at the table. Your mom is asking for your help in designing the table. *What could be the perimeter of the table?*

$18 \times 2 = 36$ ,  
so my perimeter would be 36 feet.



$$12 + 12 + 6 + 6 = 36 \text{ feet}$$
$$(2 \times 12) + (2 \times 6) = 36 \text{ feet}$$

What are other possible dimensions?



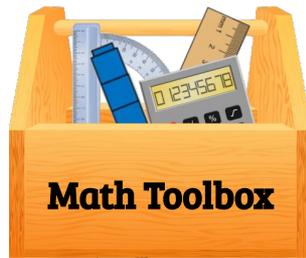
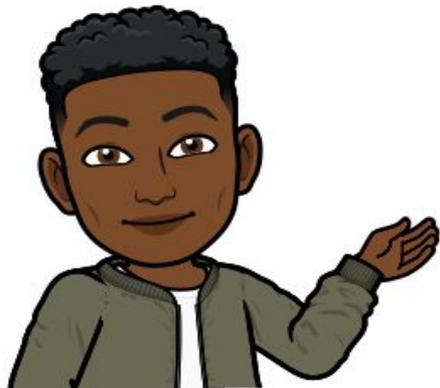
# We will use appropriate tools strategically.

## Student Mathematical Practice 5

What tools are  
in my  
Math Toolbox?



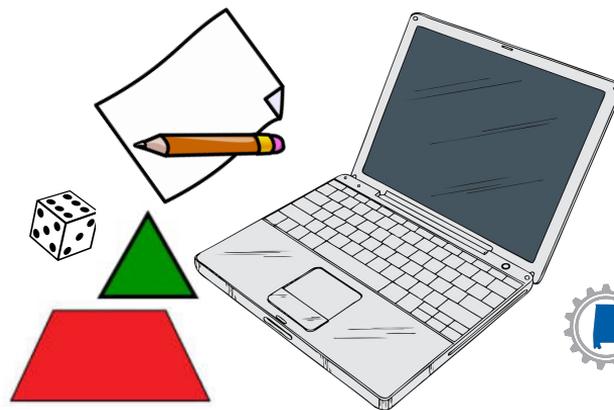
Is there a tool  
that I could use  
to help me  
make sense of  
this problem?



I know:

- **HOW** to use each math tool
- **WHEN** to use each math tool
- **WHY** to use each math tool

I can ask myself, “Did the tool help me find the answer?”

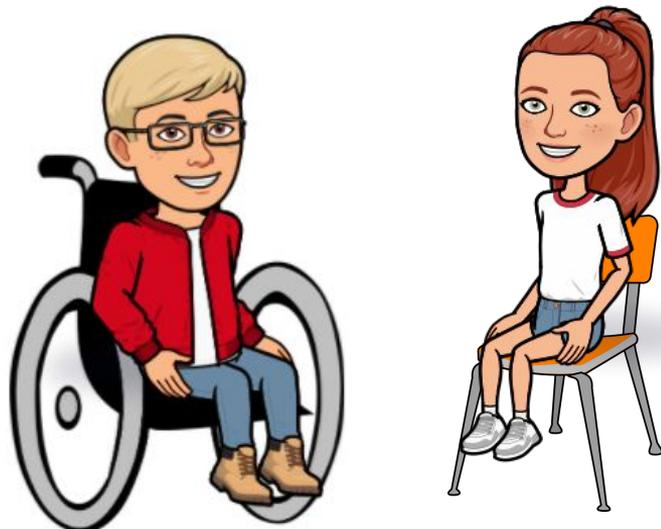


# We will attend to precision.

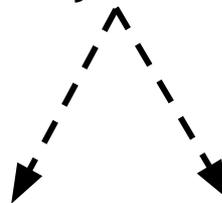
## Student Mathematical Practice 6

I will precisely communicate using math vocabulary and symbols.

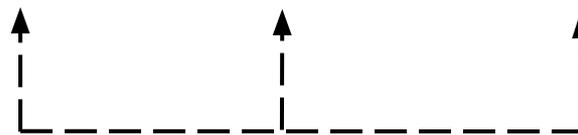
How many crayons will each student have if 9 students share 27 crayons equally?



symbols



$$27 \text{ crayons} \div 9 \text{ students} = 3 \text{ crayons per student}$$

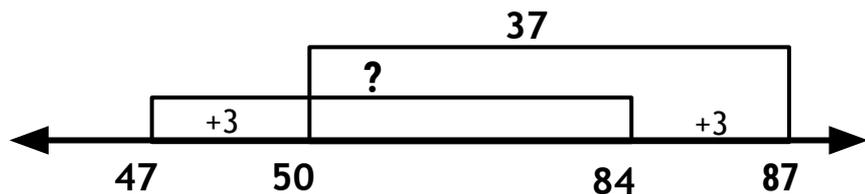


label units based on context

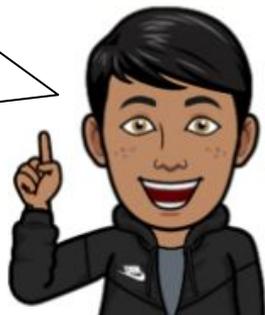
# We will look for and make use of structure.

## Student Mathematical Practice 7

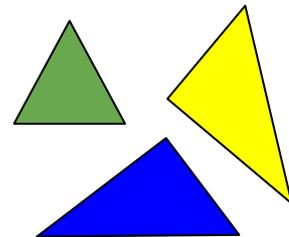
I understand that numbers and shapes are made of parts, wholes and patterns, and I use that knowledge to solve problems.



To simplify 84 minus 47, I added 3 to both numbers. This kept the distance between the two values the same while making the mental calculations easier.



I notice that each triangle is  $\frac{1}{3}$  of one trapezoid.



These are all triangles because they all have 3 sides, 3 angles and 3 vertices.



# We will look for and express regularity in repeated reasoning.

## Student Mathematical Practice 8

- I will **DISCOVER** relationships and patterns in my work.
- I will **USE** relationships and patterns to **SIMPLIFY** and **MAKE SENSE** of problems.
- I will **USE** relationships and patterns to **EVALUATE** my results.

So...  
I think that  
 $1,000 \times 5 = 5,000$ .

$$1 \times 5 = 5$$
$$10 \times 5 = 50$$
$$100 \times 5 = 500$$

