

1st Grade

Learning

Guide

Math

Grade: 1 Subject: Math

Topics:

- Adding and subtracting within 20 using different models, tools, and representations
- Ordering objects by length
- Measuring using squares
- Telling time to the nearest half hour
- Identifying, counting, and building 2D and 3D shapes
- Identifying and creating equal-sized fourths, thirds, and halves

What Your Student is Learning:

- There are many topics covered. The most important, and the one covered the most, is adding and subtracting. This is done using many different tools and models. You want your student to be flexible with these models and to see how they are related to each other. Do you notice that they prefer one model over another? That they struggle to understand one of them? You can also just give them addition and subtraction problems, within 20, and see what tools and strategies they want to use.
- As you work through the other content, spend less time on it, but think about how you can incorporate it into your day. Can you measure your dinner table using your fork? Can you identify shapes while you brush your teeth? Can you tell the time throughout your day? Can you cut your sandwich into fourths? Look for ways to bring math into your everyday!

Background and Context for Parents:

Page	Notes
1	It is possible that the shading didn't show up on your printed pages. The first two are done for you. The first one should have 1 box shaded and 9 unshaded for $1 + 9 = 10$. The second row should have 2 boxes shaded and 8 unshaded for $2 + 8 = 10$. It is important that students are flexible with all of the ways to make 10 and can represent it visually and as equations. Ask: How are all of these the same? How are they different? Do they notice that there are turnaround facts? $3 + 7 = 10$ and $7 + 3 = 10$ too!
2	Number lines are very, very important, but take practice. If we are flexible with them now, it will help a lot when students get to fractions, decimals, and negative numbers! Students can start at the first number, and then count their "hops." Ask: "How does your number line show $6 + 2$? $1 + 7$? $3 + 4$?"
3	Part 1: Can you walk around your house to find these shapes? Could you play "I spy" something that is shaped like a triangle? Ask: How do you know it is a triangle? How do you know it is a rectangle? Continue to notice, everyday, all of the shapes around you! Could you take a walk in the neighborhood to look for shapes?
4	Part 2: Many students will easily spot  but will have trouble with  . Ask: What makes something a pentagon?
5	Part 3: This should be fun and creative! Can you draw a picture too? Compare your picture to theirs. Who used more triangles? How many more? Who used fewer rectangles? How many fewer? This site has 30 day free accounts and some cool interactive apps, including one with pattern blocks like these: https://app.brainingcamp.com/manipulatives/pattern-blocks

6	Part 1: Ten frames are a very important and common model in K-2 math because they help students to see groups of 10. These models are extra helpful when we can relate them to other models. In this case, help students to see how the models relate to the equations. Ask them: how does the frame match the equation?
7	Part 2: You are continuing to practice with number lines now into the teen numbers. Ask: How does your number line match the expression? The question at the bottom might be confusing to you. The idea is that “making 10” is a very important and helpful way to add. For example, $8 + 7$ can be solved by taking 2 from the 7 to give to the 8. That makes $10 + 5$, which is a much easier fact to solve.
8	Part 1: The two small circles should add together to make 20. One of those numbers should be the number represented by the counters on the ten frames and the other number should be the remaining slots.
9	Part 2: Now you are using number lines to subtract. The most common way to do this would be to start at the first number and count back the given number of hops. So, start at 18 and hop back 2 hops -- or start at 16 and hope back 7 hops.
10	Part 1: Ask, how do you know which is the shortest? How do you know which is the longest? In addition to drawing, can you bring items from your house and put them in order?
11	Part 2: In first grade, students measure objects using units like the squares. For example, you could say, “Our coffee table is 12 pencils long.” It is important that they understand that the objects must span the entire length, cannot overlap, and must be the same size.
12	Part 1: The times in first grade must only be to the hour and half hour. Don't focus as much on “half past” language - instead focus on saying what time it is. Do you have an analog clock in your house? If so, can you practice telling time? You can also use the clock on the 30 day free app site: https://app.brainingcamp.com/manipulatives/clock
13	Part 2: Continue to practice with clocks on your own! Continue to practice telling time. Note: Many people ask why we even need to learn analog clocks nowadays. One real benefit of them is that it shows the hour as a whole, and helps students to think about each hour as a part of a whole. This is key fractional thinking that will benefit them in grades 3-5. They can think about 30 minutes as visually, half of the whole hour.
14	Part 1: These models help students to see parts and wholes. The two parts add to make the whole. The whole minus one part makes the other part.
15-16	Part 2: This worksheet is the first time in this packet where you are really engaging with word problems. Read them out loud. Ask: What is happening in the problem? Tell me what is happening in your own words. Then, how can you use the models to help you represent and solve the problem?
17	Part 1: Now you are working with 3D shapes!

18	Part 2: Can you find more examples of these shapes in your house? Do a scavenger hunt! Ask: How can you tell this object is shaped like ____?
19	Part 3: This is not really required in first grade, so you can skip this if you want, or do it as a challenge. If you have the materials, you could actually cut out paper like each “net” and try folding it up to see if it makes the shape.
20	Part 1: These are fact families. I can create 2 addition and 2 subtraction facts for each family by reversing the numbers. Part of why this is important is that we can use facts we know to find facts that we don't. For example, when I am subtracting $12 - 8$, I can ask myself $8 +$ what equals 12?
21	Part 2: The first problem has the sum on the left. Students should be used to this, but it is less common, so it might confuse them. Make sure they show and explain how they know the problems are true or false.
22	Part 3: There are different ways to think about and solve these problems, so ask students to explain their ideas. For example, for the first one I could say, I start at 8 and count up, “9, 10” that's 2! Or, I could say, I know that $10 - 8$ is 2 so $2 + 8$ is 10.
23	Part 1: Students don't really work with fractions in 1st grade, but they do think about shapes as broken into equal sized halves, thirds, and fourths. The equal-sized pieces are the key idea here. Think about fairness and sharing a cake or pie.
24	Part 2: Ask: Are there multiple ways to cut these shapes into halves and fourths? How can you tell that you cut the shape correctly?
25	This is important because we don't want them to think fractions have to look any certain way. The key feature is that the pieces are all equal sizes. Folding paper is a great hands on way to do this!

Ways to support your student:

- Read the problem out loud to them.
- Remember, focus on strategies instead of answers. We want students to understand and be flexible with numbers.
- Before giving your student the answer to their question or specific help, ask them “What have you tried so far? What do you know? What might be a next step?”
- After your student has solved it, and before you tell them it's correct or not, have them explain to you how they got their solution and if they think their answer makes sense.

Online Resources for Parents and Students:

- Interactive ten-frame practice. You can select different options, including counting, building, filling, and adding:
<https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/>
- Online Practice Games for First Grade Content:
<https://www.splashlearn.com/math-skills/first-grade>
- This site has free 30 day accounts. You can use number lines, clocks, and pattern blocks.
<https://app.brainiaccamp.com/>
- Cheesy song video for ways to make 10 (like page 1):
https://www.youtube.com/watch?v=YBkpC29_Gal

Learning Support for Mathematics

For students that are approaching grade level and have learning gaps/ differences in mathematics, provide numerous opportunities for explorations at the concrete (manipulatives) and representational (visual) levels before progressing to the abstract (numbers) level. Students that need learning supports should be provided with:

- Intensive Direct Instruction and daily guided practice
- scaffolded supports
- the use of visuals as models and aids
- numerous opportunities to think out loud
- support to help them understand the why
- use of manipulatives and tools to support understanding
- Bar Modeling Representations to decode word problems
- the use of mnemonics to enhance retention of skills
- daily practice with basic facts
- the presentation of content in varied contexts and varied levels
- opportunities to use diagrams and draw math concepts
- graph paper to support understanding
- numerous opportunities to draw pictures of word problems
- the use of smaller numbers to address number operations
- opportunities for success to build a growth mindset
- computer time to allow for needed practice
- opportunities to engage in metacognition (the building and reinforcing of thinking and reasoning) skills

See examples for each bulleted item on the following pages

- **Intensive Direct Instruction and daily guided practice**

(Intensive Direct Instruction means to explain the skill / concept to the student with several examples repeatedly to help them understand)

https://youtu.be/F_HzrRBOU7I / https://youtu.be/OJJkkUPC_yM

- **Scaffolded Supports**

(Scaffolded supports means to introduce the skill one step at a time – allowing the student to understand one section part, before moving on to the next part) ex. $5+1=6$, $9+1=10$, $24+1=25$ - it is the same as “what number comes after 5, after 9, after 24

https://youtu.be/5hWDbSx_kdo

- **Visuals as models and aides**

(Pictures of objects that can be used to help students understand the math)

<https://studentsatthecenterhub.org/resource/helping-struggling-students-build-a-growth-mind-set/>

- **Thinking out loud**

(Allows students to talk and think about the skills they are learning, which allows them to better remember the skill)

<https://youtu.be/f-4N7OxSMok>

- **Understanding the why**

(When students understand why a strategy works, they will apply it to other skills) ex. $5 \times 5 = 25$, $45 \times 1 = 45$, $320 \times 1 = 320$

- **Manipulatives and Tools**

(Manipulatives can be counters, beans, blocks, etc. – Tools can be rulers, calculators, scales, etc.) <https://youtu.be/uWBZF-Lyq58>

- **Bar Modeling Representations**

(Bar Modeling Representations consist of visuals that help students understand the skill they are learning. Ex.

70	
35	35

https://youtu.be/TbayTZvS_bc

- **Mnemonics**

(Mnemonics consist of strategies to help students remember skills – ex.

Mnemonic Devices

Every Good Boy Does Fine

Elvis' Guitar Broke Down Friday Eat Good Burritos During Fiesta

Treble clef
Line notes

E4 G4 B4 D5 F5

STARRY TABS

Mnemonic

Please	P	- Parenthesis
Excuse	E	- Exponent
My	M	- Multiplication
Dear	D	- Division
Aunt	A	- Addition
Sally	S	- Subtraction

<https://youtu.be/dXvvGc9TIdY>

- **Basic Facts**

(Basic facts include addition, subtraction, division, multiplication facts –

ex. $8+2=10$, $2+8=10$, $10-2=8$, $10-8=2$ / $2 \times 5=10$, $5 \times 2=10$, $10/2=5$, $10/5=2$

https://youtu.be/TbayTZvS_bc

- **Content with varied contexts and varied levels**

Means to show student how to solve a problem different ways to allow them to use the skill that way they understand best

<https://youtu.be/FVg9n0I0Gf0>

- **Diagrams**

(Diagrams provide students with visuals / pictures that help them solve the problem and they help them read the problem with less words)

https://youtu.be/TbayTZvS_bc

- **Graph paper**

(Graph paper helps students to solve the problem by making it visual / easier to see the answer)

<https://youtu.be/mX43cn3IASI>

- **Drawing Pictures**

(Drawing pictures allow students to show they can solve the problem without using words that they may not know or be able to write)

https://youtu.be/TbayTZvS_bc

- **Smaller Numbers**

(The use of smaller numbers can help students understand the process of a skill, so that when they move on to bigger numbers, they will see that the process is still the same, they acquire understanding of the skill) ex. $5x = 5$, $45x1 = 45$, $320x1 = 320$

- **Growth Mindset**

(A growth mindset is a process that helps to improve intelligence (thinking), ability (skill) and performance (actions). This means that by helping students to develop a growth mindset, we can help them to learn to think and be problem solvers. This is a process that occurs over time by helping them improve by building success over time.

<https://studentsatthecenterhub.org/resource/helping-struggling-students-build-a-growth-mindset/>

- **Computer Time**

(Computer time allows students to use websites, games, activities that will help them learn math skills and concepts)

mathgametime.com, pbs.com, bestkidsolutions.com, firstinmath.com, helpingkidsrise.org

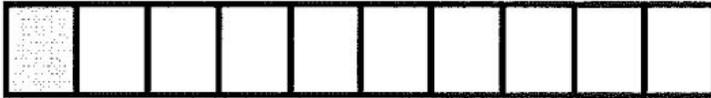
- **Metacognition**

(Metacognition means to help students think about what they are thinking, the steps they are using, the words and numbers that they are using- It helps students to better focus on the skills they are using- it is a process that occurs over time) / <https://youtu.be/HKFOhd5sMEc/>

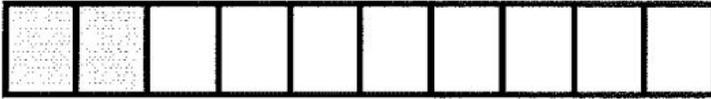
<http://www.spencerauthor.com/metacognition/>

Part 1: What are all the ways to add to 10?

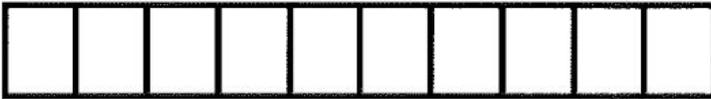
Color the 10-sticks with two colors and write equations like the examples:



$1 + 9 = 10$



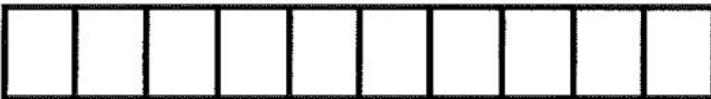
$2 + 8 = 10$



$_ + _ = 10$



$_ + _ = 10$



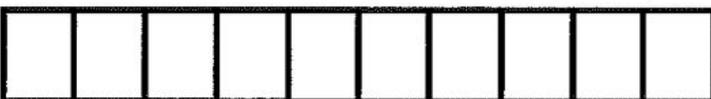
$_ + _ = 10$



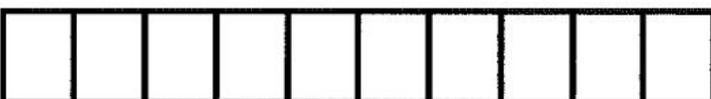
$_ + _ = 10$



$_ + _ = 10$



$_ + _ = 10$



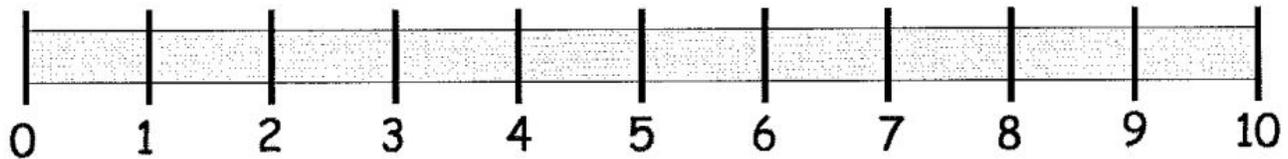
$_ + _ = 10$



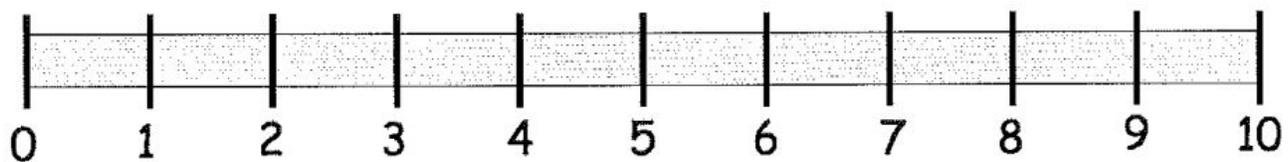
$_ + _ = 10$

Part 2: Addition within 10 on a Number Line

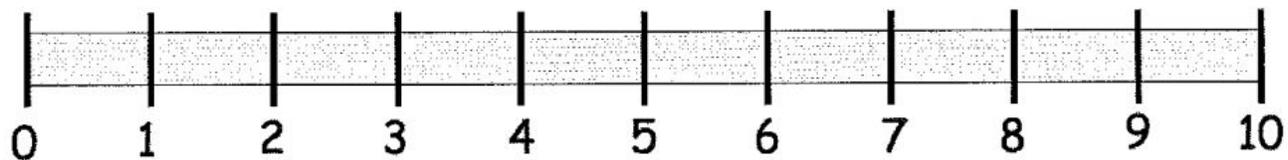
Use the number line to solve $6 + 2$.



Use the number line to solve $1 + 7$.



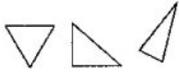
Use the number line to solve $3 + 4$.



Show one way to make 10 using addition.

Part 1: Find and Draw Shapes

Look for things that are triangle shaped. Draw and label them.

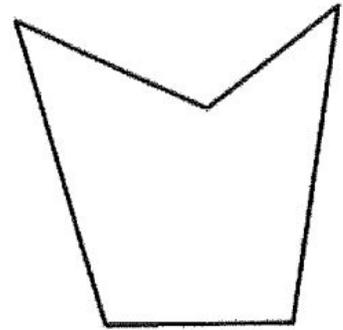
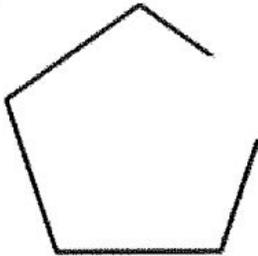
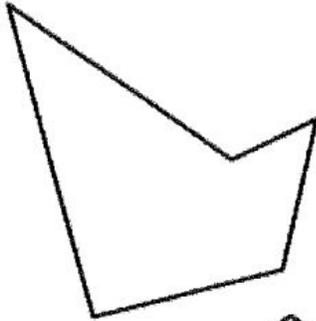
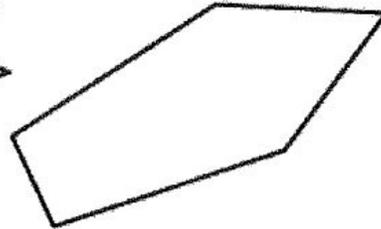
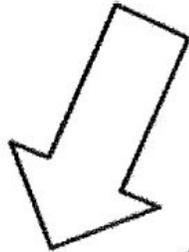
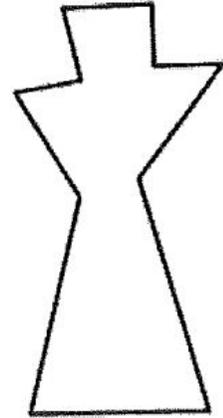
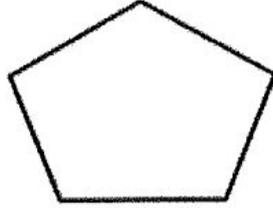
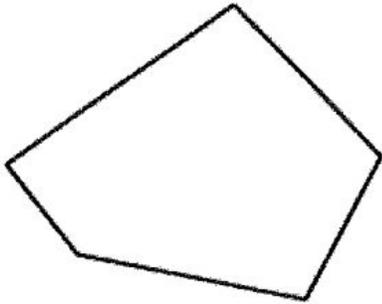
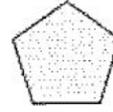


Look for things that are rectangle shaped. Draw and label them.



Part 2: Find the Pentagons

Pentagons are five-sided shapes.
Circle all of the pentagons.



Part 3: Composing Shapes

Draw a picture using \triangle , \square , \square , \hexagon , \circ , and/or \trapezoid .

Write how many of each shape you used.

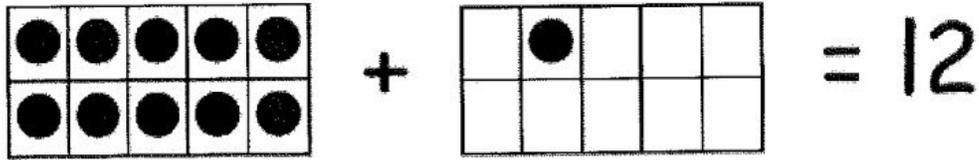
\triangle	\square	\hexagon
\square	\trapezoid	\circ



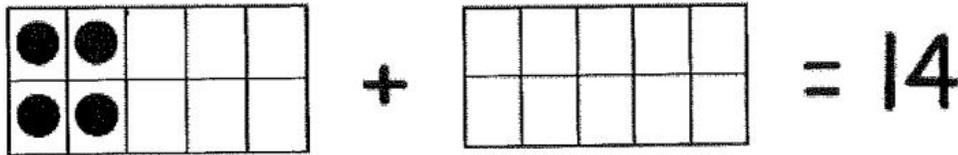
Draw a rectangle and a shape that is *not* a rectangle. Label them.

Part 1: Addition on Ten Frames

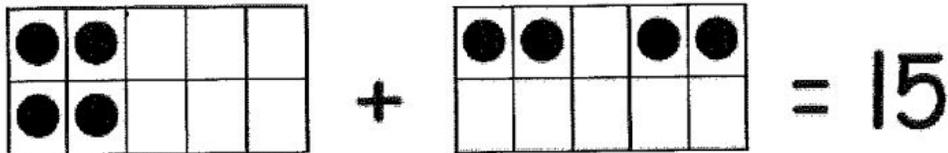
Add dots to the ten frames using another color to make the number shown. Write an equation that matches the picture.



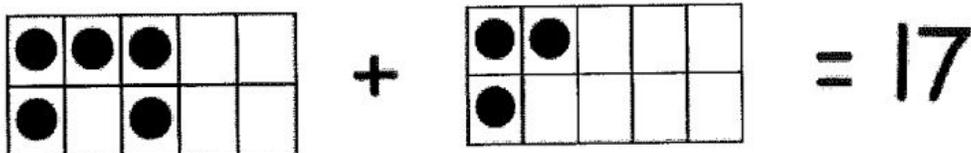
$$\underline{\quad\quad} + \underline{\quad\quad} = 12$$



$$\underline{\quad\quad} + \underline{\quad\quad} = 14$$



$$\underline{\quad\quad} + \underline{\quad\quad} = 15$$

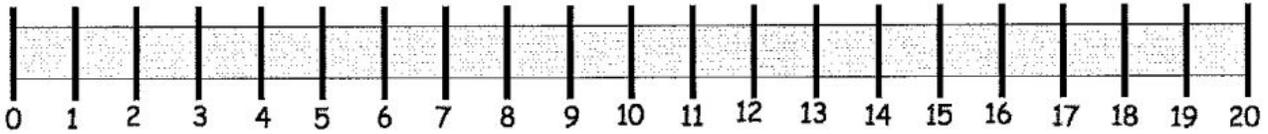


$$\underline{\quad\quad} + \underline{\quad\quad} = 17$$

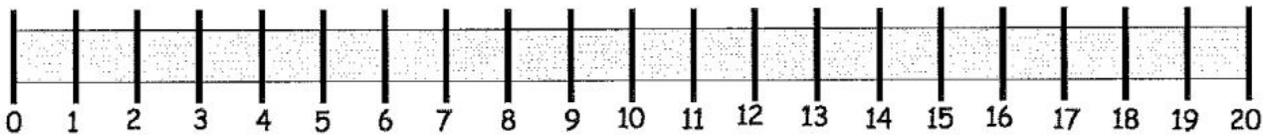
Part 2: Addition on Number Lines

Use the number line to solve each addition problem.

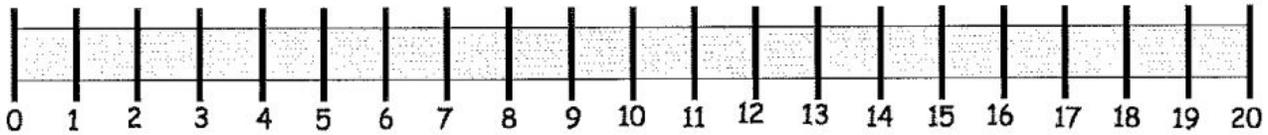
$13 + 2$



$1 + 15$



$8 + 7$

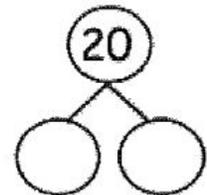
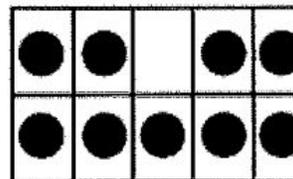
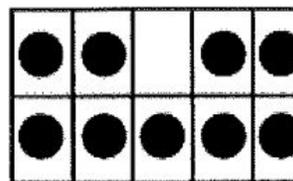
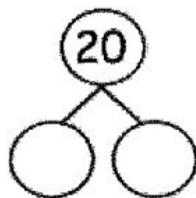
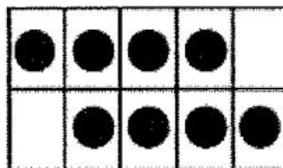
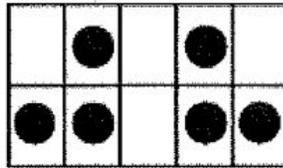
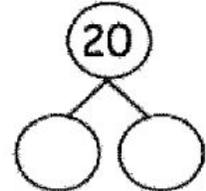
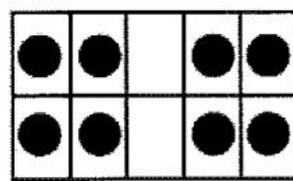
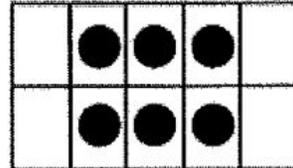
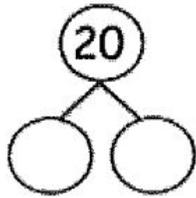
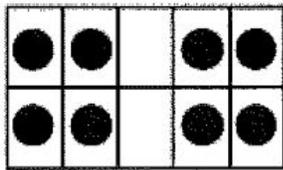
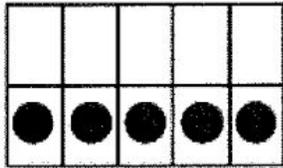


Rewrite one of your equations as a 10 + equation.

$$\underline{\quad} + \underline{\quad} = 10 + \underline{\quad}$$

Part 1: How many more to make 20?

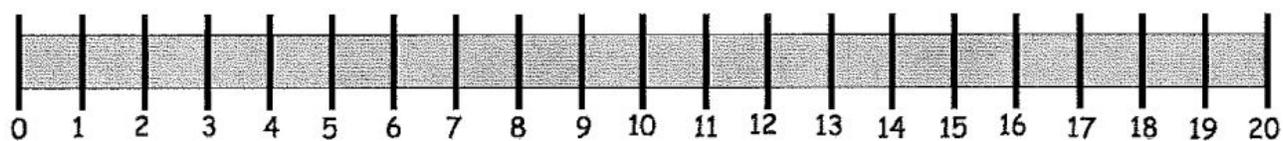
Fill in the number bonds to show the combination that makes 20.



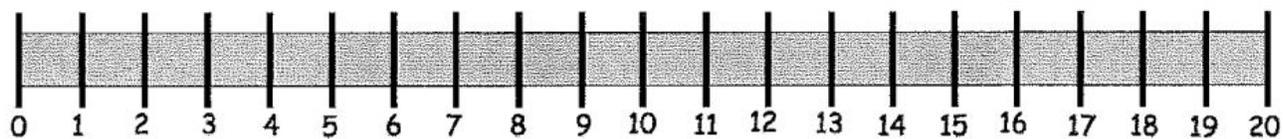
Part 2: Subtraction on a Number Line

Use the number line to solve the problem.

$$18 - 2 = \underline{\quad}$$



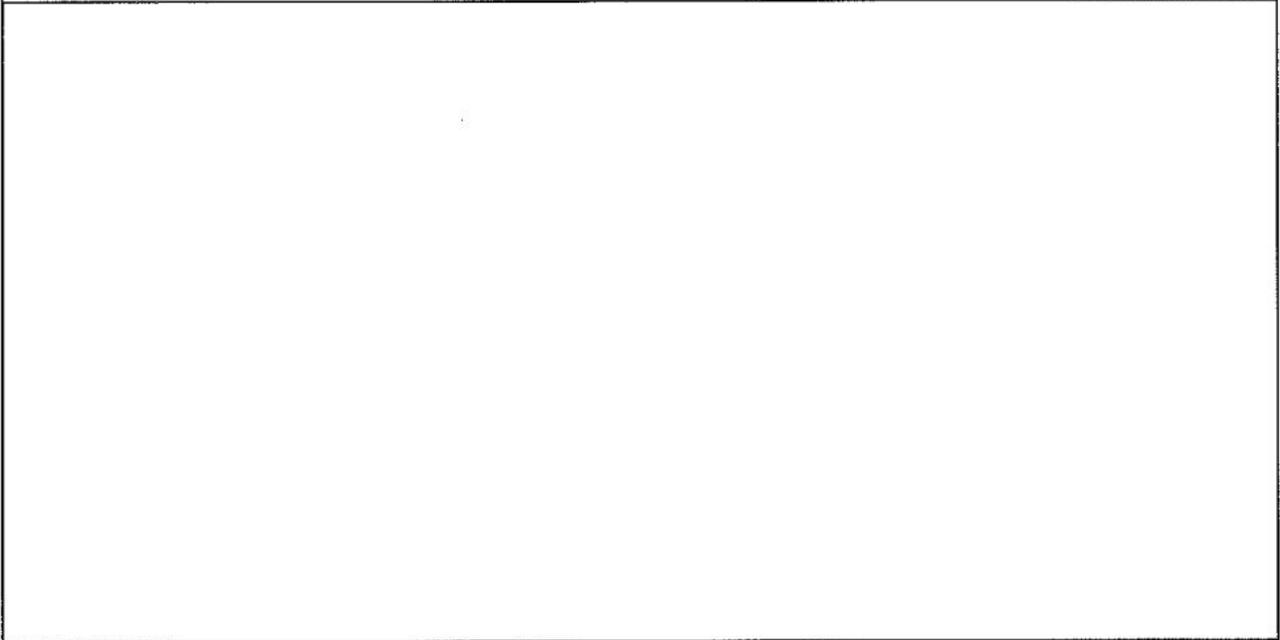
$$16 - 7 = \underline{\quad}$$



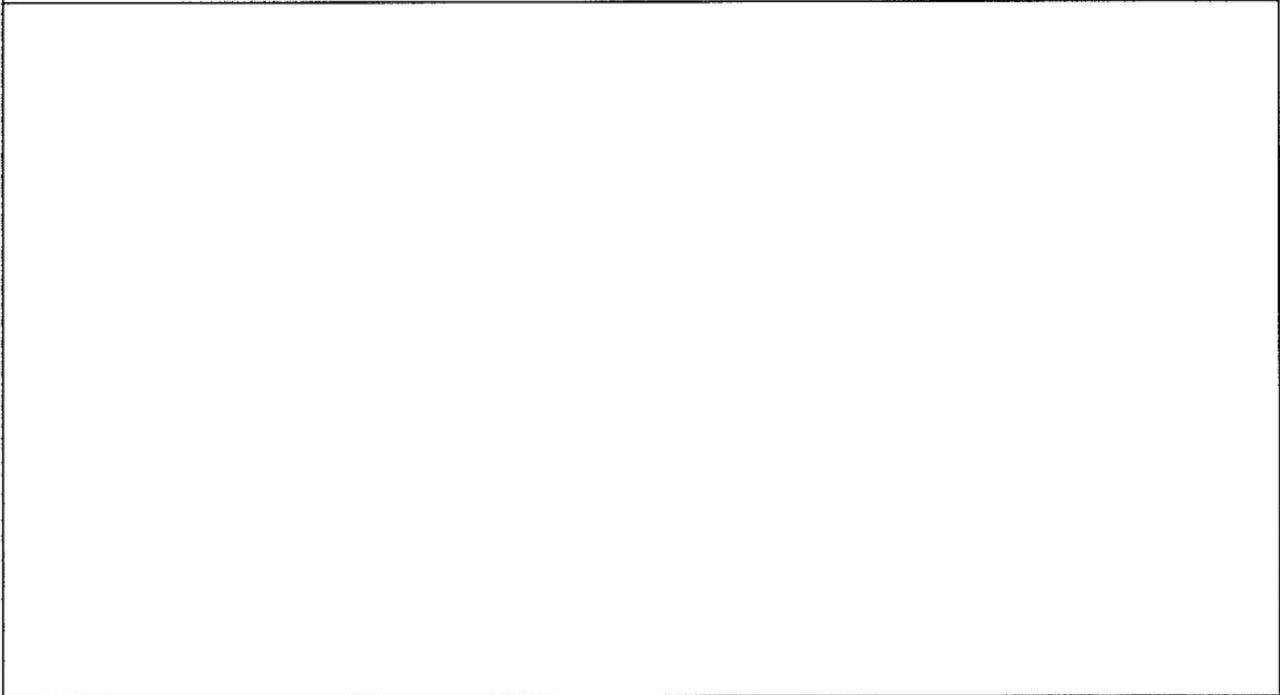
Show two different ways to solve $12 - 4$.

Part 1: Ordering Objects by Length

Draw 3 things in order from longest to shortest.

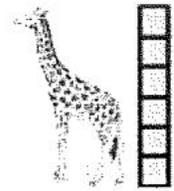


Draw 3 different things in order from shortest to longest.

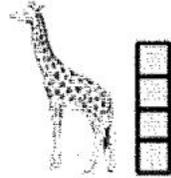
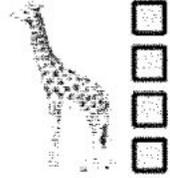
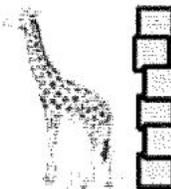
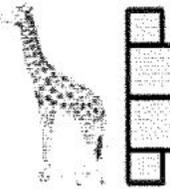


Part 2: Measuring with Squares

This giraffe is measured correctly with squares.

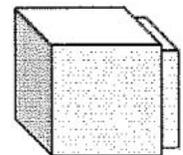


Tell why each giraffe below is measured incorrectly.

 <hr/> <hr/> <hr/>	 <hr/> <hr/> <hr/>
 <hr/> <hr/> <hr/>	 <hr/> <hr/> <hr/>

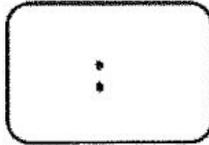


About how many linking cubes long do you think your pencil is?

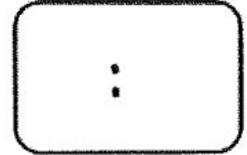
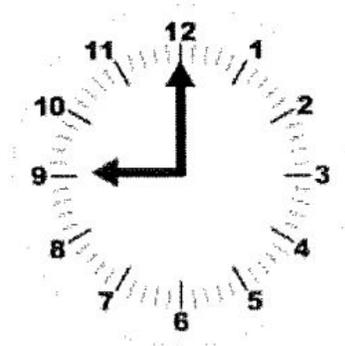


Part 1: Tell Time

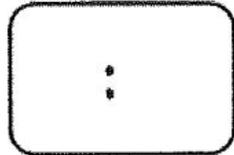
Write the times in the digital clocks and complete the blanks.



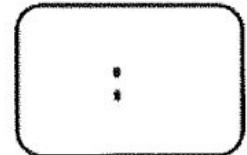
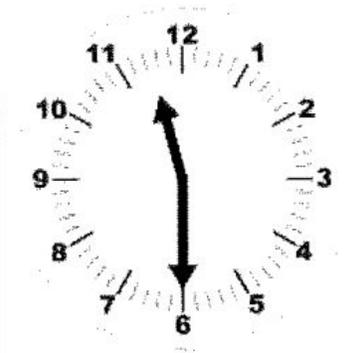
Half past _____ o'clock



_____ o'clock



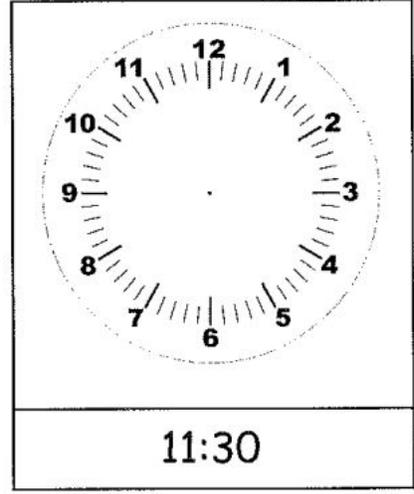
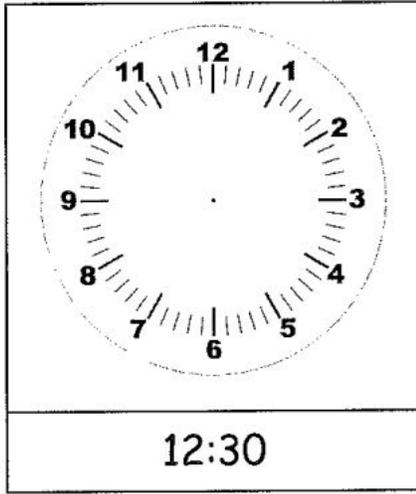
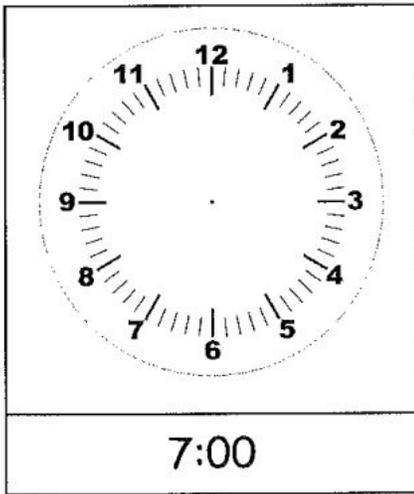
_____ o'clock



Half past _____ o'clock

Part 2: Show Time

Show the time on each clock.



What is something you might do at 7:30 at night?

Part 1: Tape Diagrams with Unknowns

Find the unknown. Write an equation that matches.

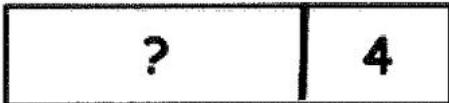
14



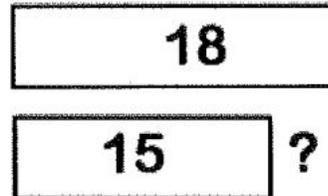
18



15



18

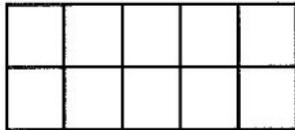


Part 2: Equations with Unknowns

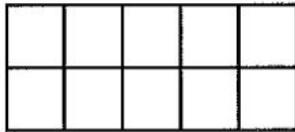
Circle the equation that matches the story. Solve the problem using ten frames or number lines.

13 oranges were on the table. I ate 6 oranges. How many oranges are on the table now?

$13 - 6 = ?$

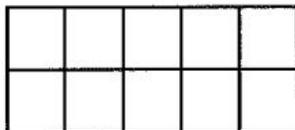


$13 + 6 = ?$

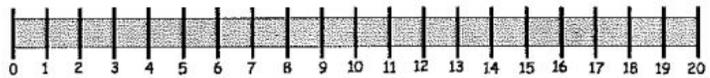
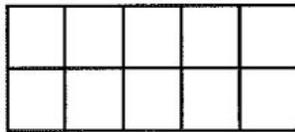


12 grapes are on the table. 4 are red and the rest are green. How many grapes are green?

$4 + ? = 12$



$12 + 4 = ?$

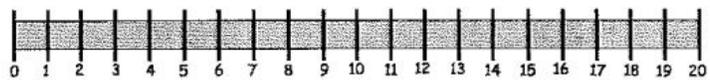
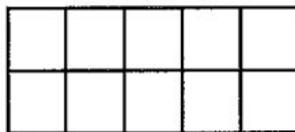


9 turtles were sitting in the pond. Some more turtles came. Then there were 15. How many turtles came?

$9 + 15 = ?$



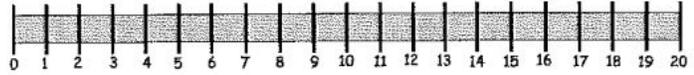
$9 + ? = 15$



19 nuts were on the table. I ate some nuts. Now there were 13 nuts. How many nuts did I eat?

$18 - ? = 12$

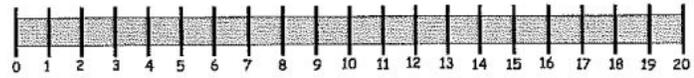
$18 - 12 = ?$



Melissa has 7 grapes. Tamara has 12 grapes. How many more grapes does Tamara have than Melissa?

$7 + ? = 12$

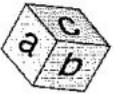
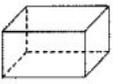
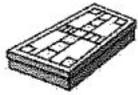
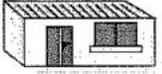
$7 + 12 = ?$



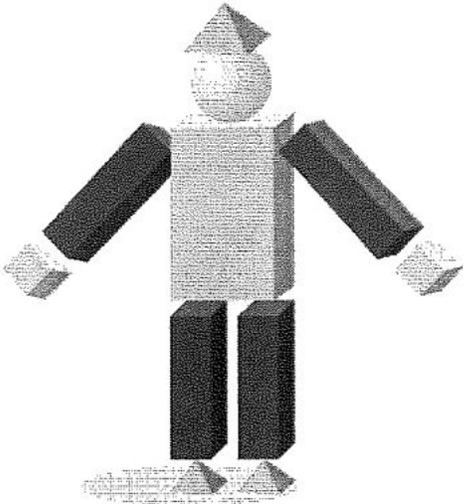
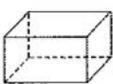
Think of an addition or subtraction situation. Draw a tape diagram that matches and label the parts, including the unknown.

Part 1: Identifying shapes

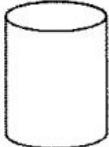
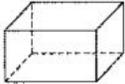
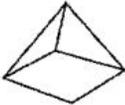
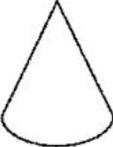
How many of each shape?

How many of each shape?

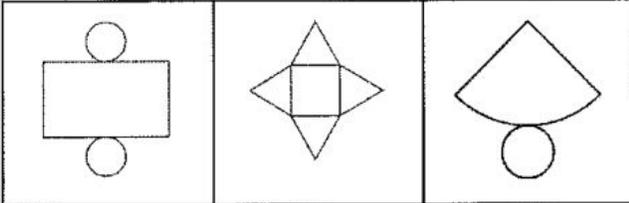
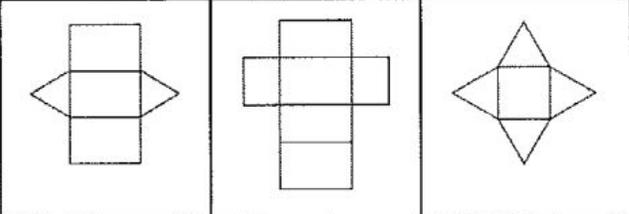
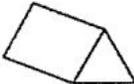
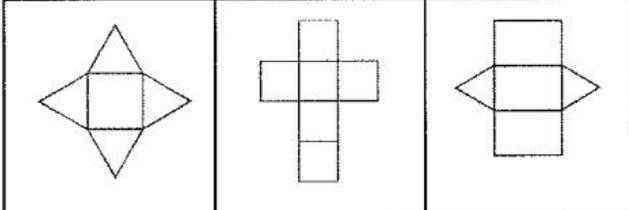
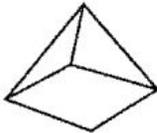
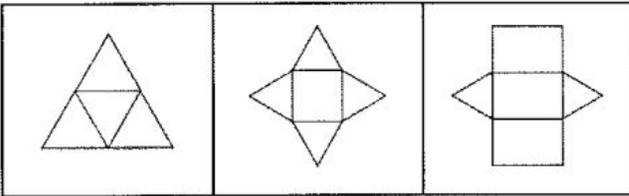
		
		
		
		

Part 2: Drawing Shapes

<p>Look for objects that are cylinder shaped. Draw and label each object you find.</p>	<p>Look for objects that are rectangular prism shaped. Draw and label each object you find.</p>
	
<p>Look for objects that are square pyramid shaped. Draw and label each object you find.</p>	<p>Look for objects that are cone shaped. Draw and label each object you find.</p>
	

Part 3: Faces of 3-D Shapes

Circle the net that makes each shape and tell how you know.

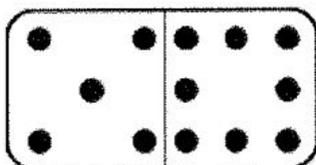
<p>cone</p>  <div data-bbox="168 464 797 667">  </div> <p>How do you know?</p>	<p>rectangular prism</p>  <div data-bbox="829 453 1458 667">  </div> <p>How do you know?</p>
<p>triangular prism</p>  <div data-bbox="168 1157 797 1367">  </div> <p>How do you know?</p>	<p>square pyramid</p>  <div data-bbox="829 1171 1458 1367">  </div> <p>How do you know?</p>

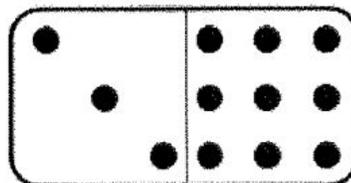


Draw and label your favorite 3-D Shape.

Part 1: Writing Equations

Use the domino to create addition and subtraction equations.





Write two addition equations that are related to $9 - 5 = \underline{\quad}$.

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

Write two addition equations that are related to $12 - 7 = \underline{\quad}$.

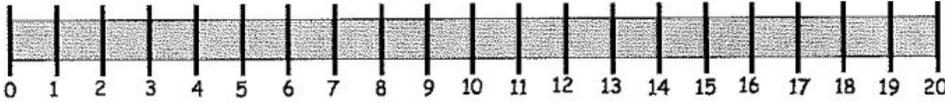
$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

$$\underline{\quad} + \underline{\quad} = \underline{\quad}$$

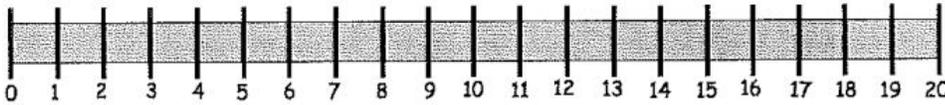
Part 2: True or False?

Circle the facts that are true, and show how you know using the number lines or ten frames.

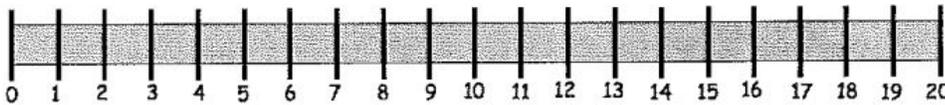
$$14 = 7 + 7$$



$$14 + 1 = 13$$



$$8 + 9 = 17$$



Find the false equation. Turn it into a true equation.

$$10 - 1 = 11$$

$$6 = 13 - 7$$

$$17 - 8 = 9$$

$$4 = 8 - 4$$

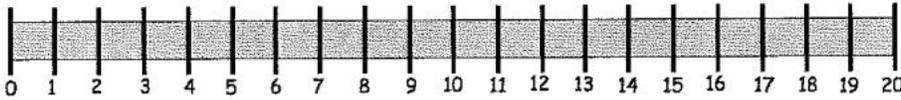
$$20 - 10 = 11$$

$$15 - 8 = 7$$

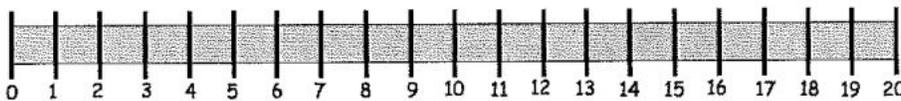
Part 3: Unknowns

Fill in the unknowns to make the equations true. You may use the number lines or ten frames to help you.

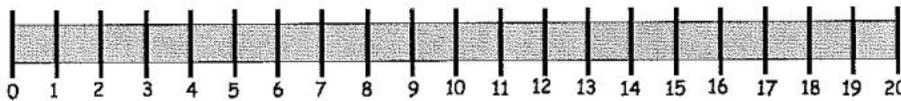
$$\underline{\quad} + 8 = 10$$



$$12 = 6 + \underline{\quad}$$



$$16 - \underline{\quad} = 9$$

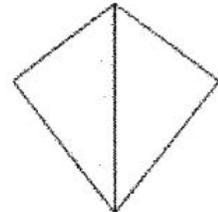
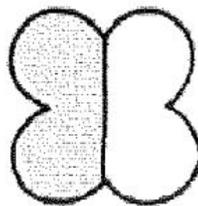
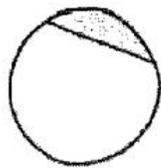
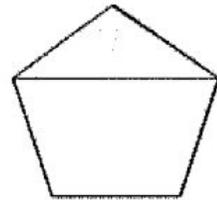
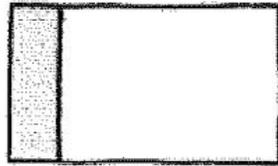
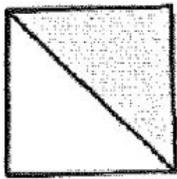




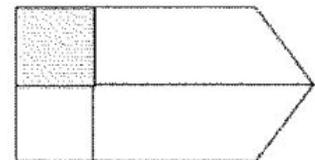
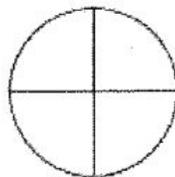
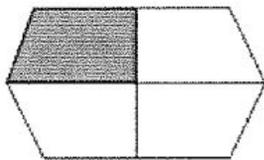
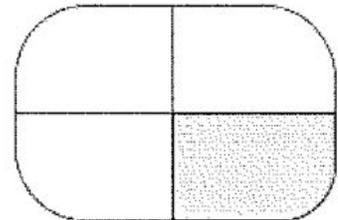
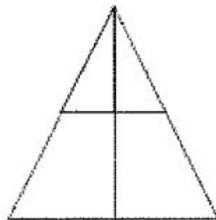
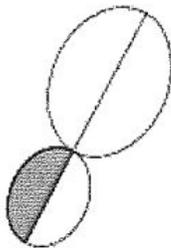
Write one addition and one subtraction equation that equal 15.

Part 1: Identify Halves and Fourths

Circle the shape that is half shaded.

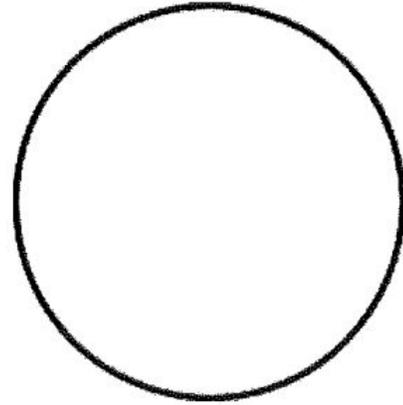
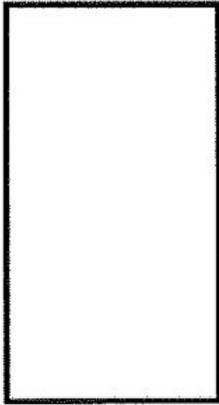
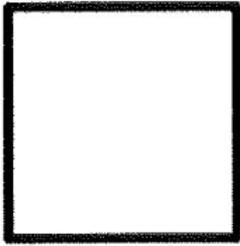


Circle the shape that is one fourth shaded.

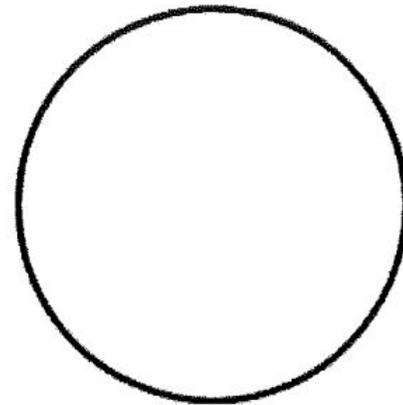
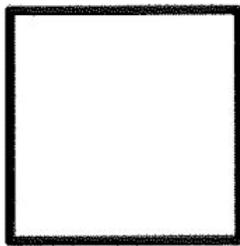


Part 2: Partition into Halves and Fourths

Draw a line to cut each shape into 2 halves.



Draw lines to cut each shape into 4 quarters (fourths).





If you have a piece of paper, fold it into fourths in *two* different ways.

Draw a picture of your paper and the different folds.

ANSWER

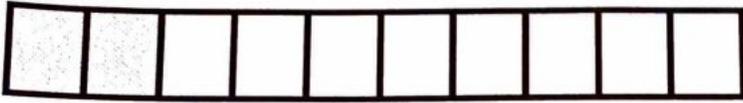
KEY

Part 1: What are all the ways to add to 10?

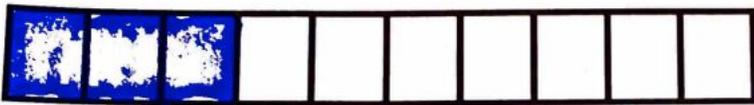
Color the 10-sticks with two colors and write equations like the examples:



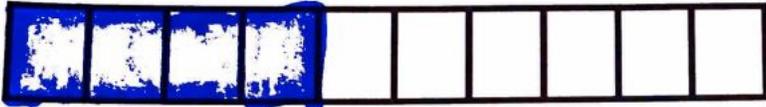
$$1 + 9 = 10$$



$$2 + 8 = 10$$



$$\underline{3} + \underline{7} = 10$$



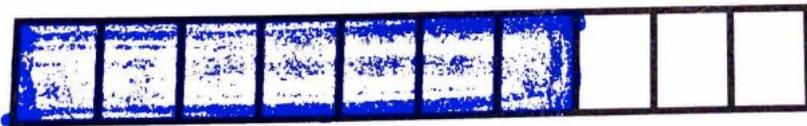
$$\underline{4} + \underline{6} = 10$$



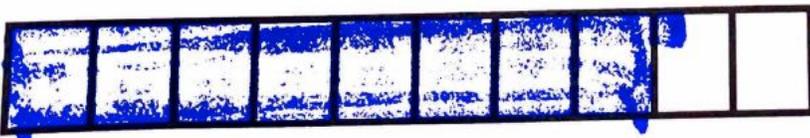
$$\underline{5} + \underline{5} = 10$$



$$\underline{6} + \underline{4} = 10$$



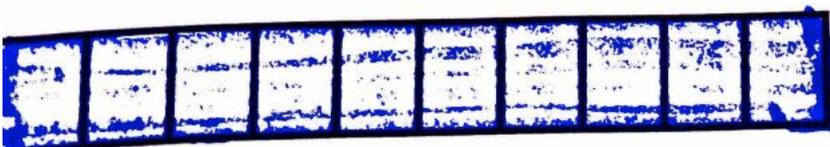
$$\underline{7} + \underline{3} = 10$$



$$\underline{8} + \underline{2} = 10$$



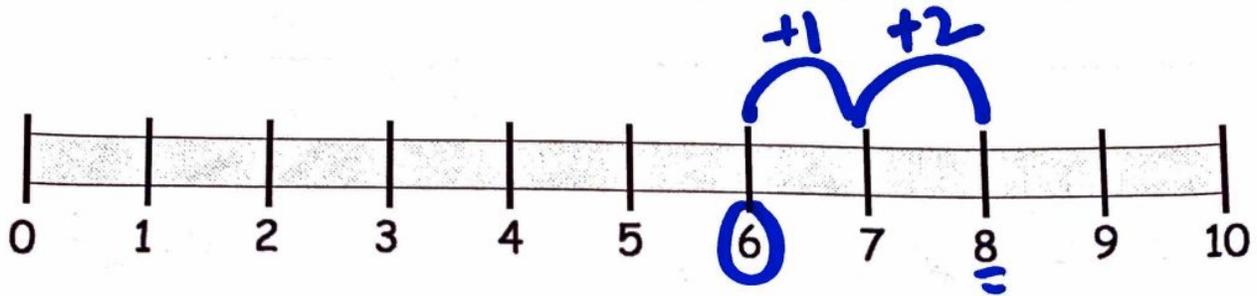
$$\underline{9} + \underline{1} = 10$$



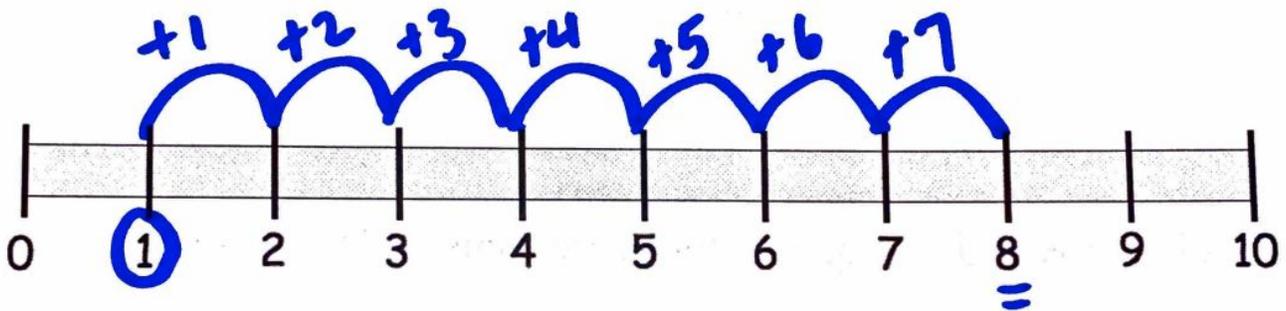
$$\underline{10} + \underline{0} = 10$$

Part 2: Addition within 10 on a Number Line

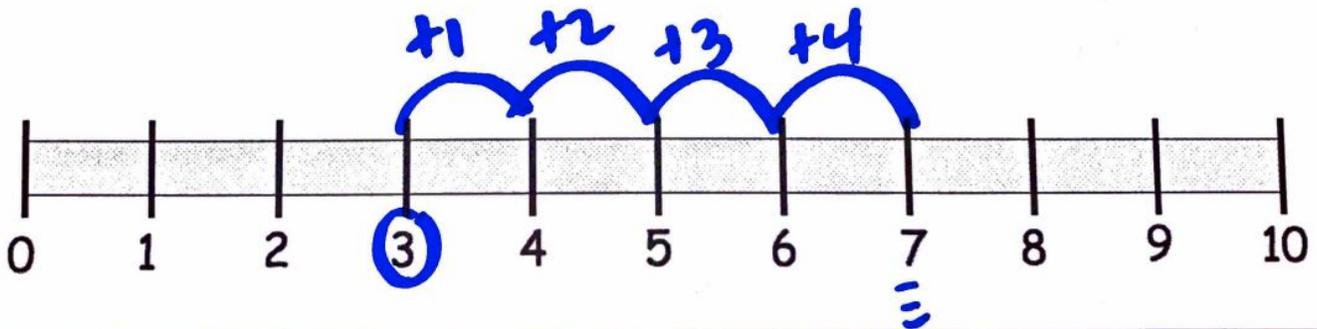
Use the number line to solve $6 + 2$.



Use the number line to solve $1 + 7$.



Use the number line to solve $3 + 4$.



Show one way to make 10 using addition.

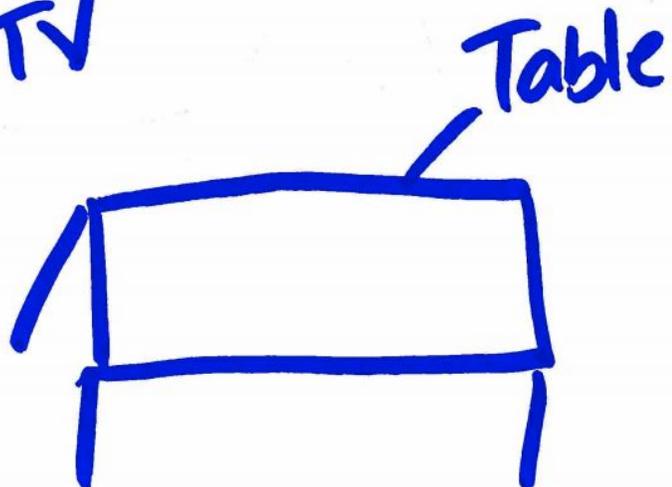
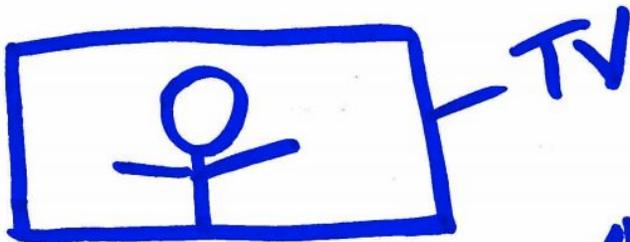
$5 + 5$ or $2 + 8$ or $7 + 3$

Part 1: Find and Draw Shapes

Look for things that are triangle shaped. Draw and label them.

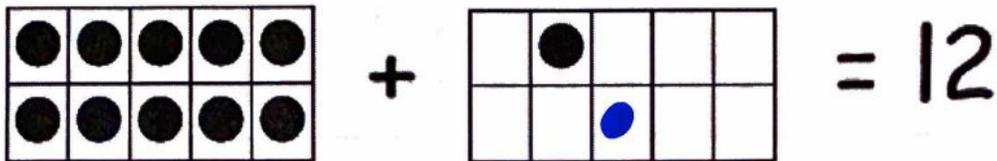


Look for things that are rectangle shaped. Draw and label them.

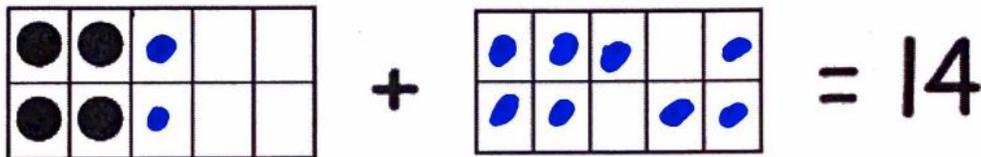


Part 1: Addition on Ten Frames

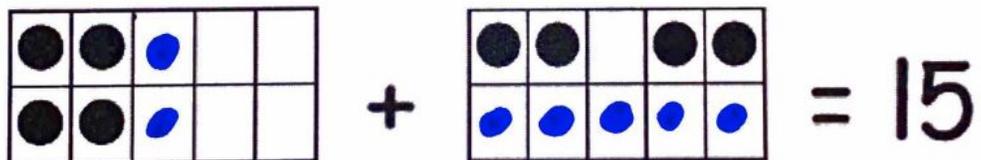
Add dots to the ten frames using another color to make the number shown. Write an equation that matches the picture.



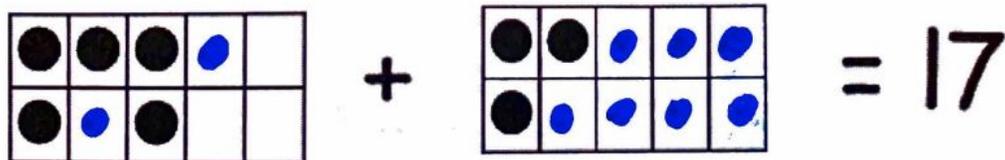
$$\underline{10} + \underline{2} = 12$$



$$\underline{6} + \underline{8} = 14$$



$$\underline{6} + \underline{9} = 15$$

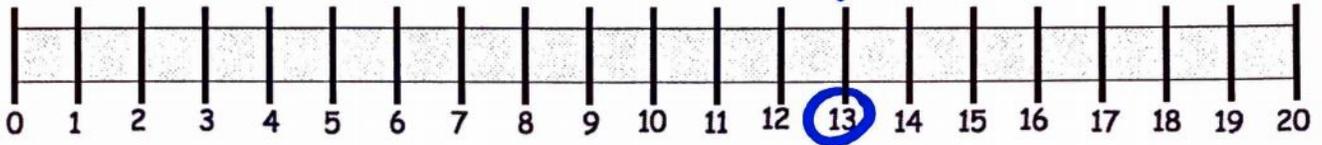


$$\underline{7} + \underline{10} = 17$$

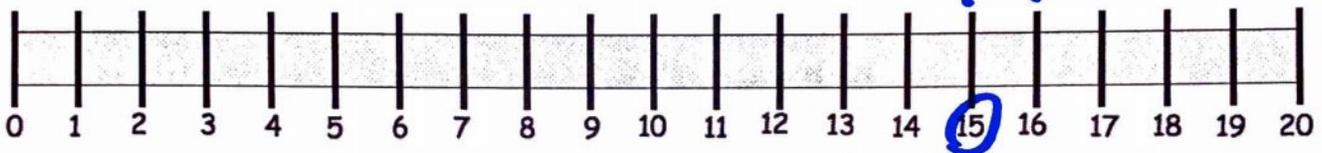
Part 2: Addition on Number Lines

Use the number line to solve each addition problem.

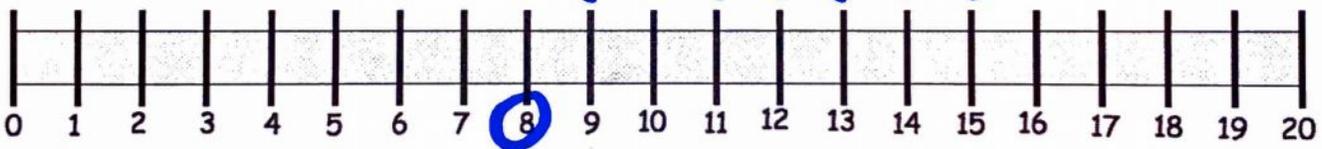
$13 + 2$



$1 + 15$



$8 + 7$

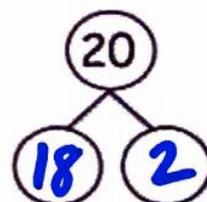
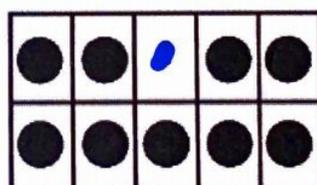
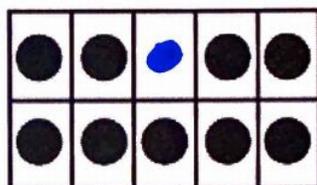
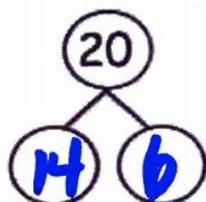
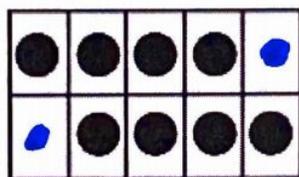
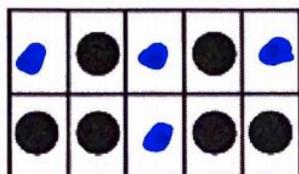
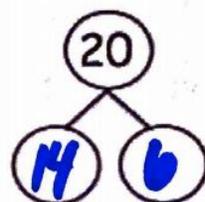
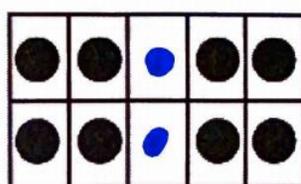
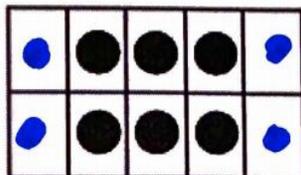
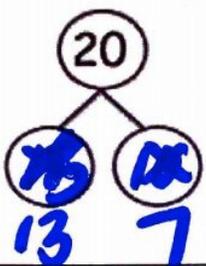
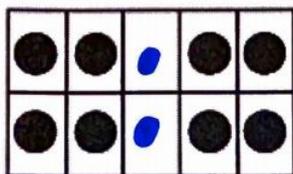
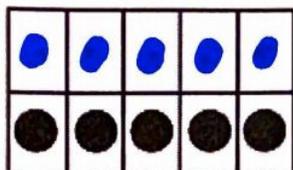


Rewrite one of your equations as a 10 + equation.

$$\underline{13} + \underline{2} = 10 + \underline{5}$$

Part 1: How many more to make 20?

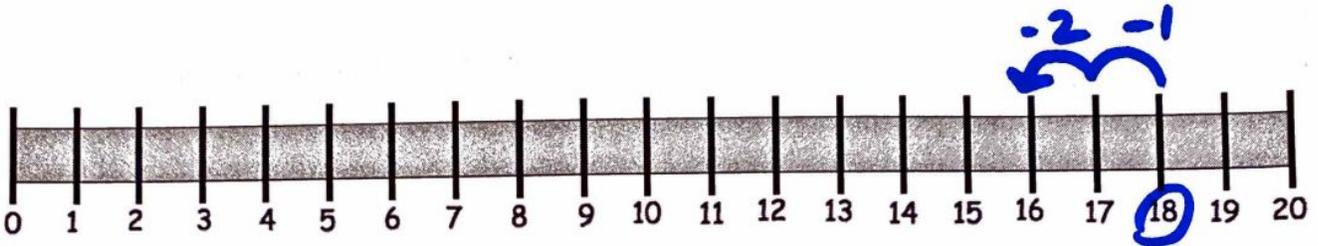
Fill in the number bonds to show the combination that makes 20.



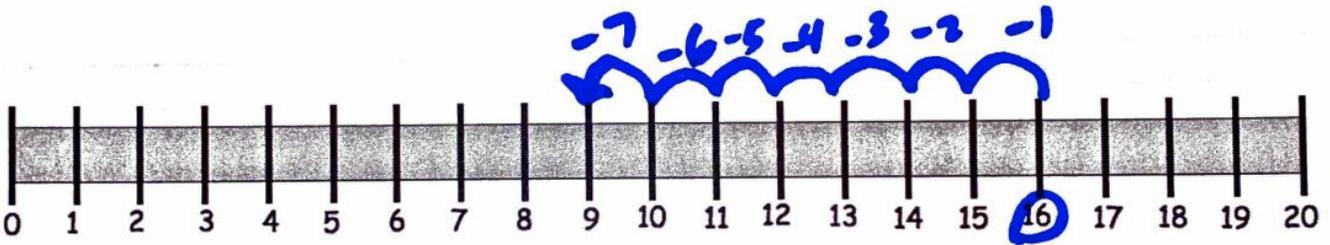
Part 2: Subtraction on a Number Line

Use the number line to solve the problem.

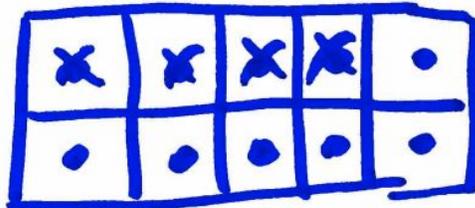
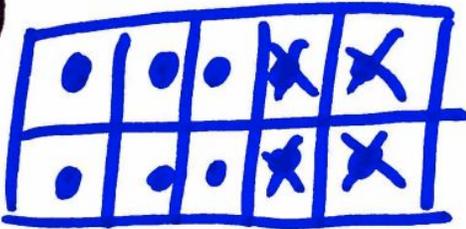
$$18 - 2 = \underline{16}$$



$$16 - 7 = \underline{9}$$

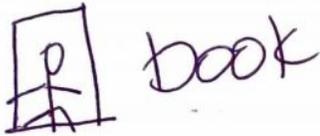
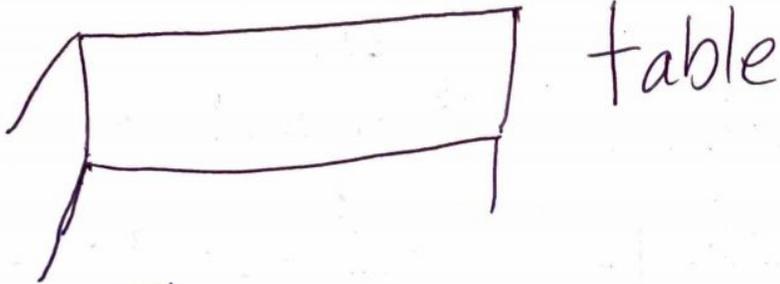


Show two different ways to solve $12 - 4$.

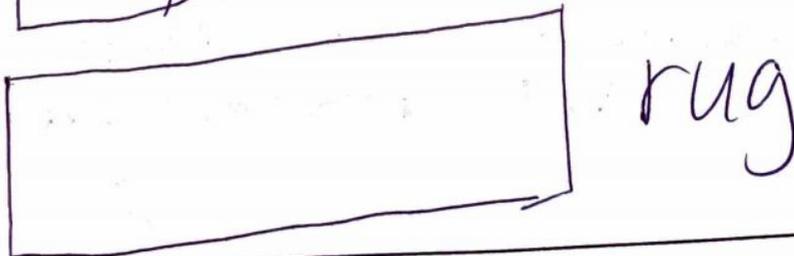
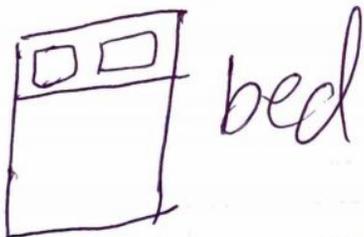
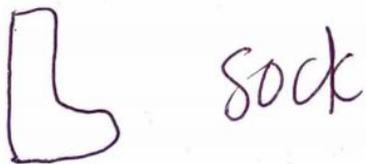


Part 1: Ordering Objects by Length

Draw 3 things in order from longest to shortest.



Draw 3 different things in order from shortest to longest.



Part 2: Measuring with Squares

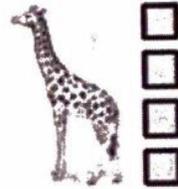


This giraffe is measured correctly with squares.

Tell why each giraffe below is measured incorrectly.



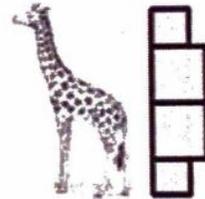
It does not
measure his full
height.



There are spaces
between the
blocks



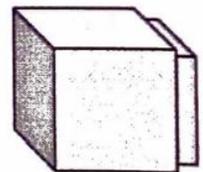
The blocks are
not straight



The blocks are
not the same
size.



About how many linking cubes long do you think your pencil is?



6

Part 1: Tell Time

Write the times in the digital clocks and complete the blanks.



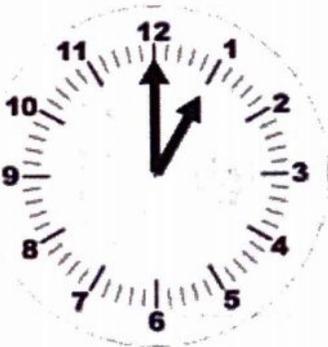
6:30

Half past 6 o'clock



9:00

9 o'clock



1:00

1 o'clock

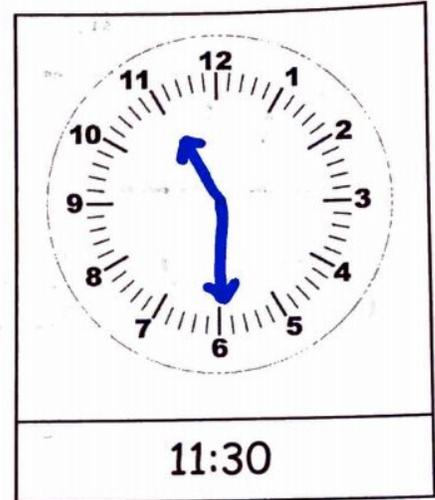
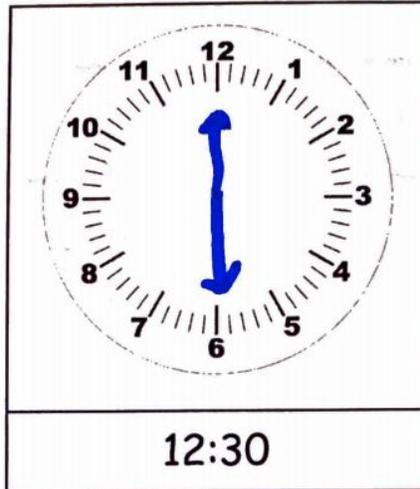
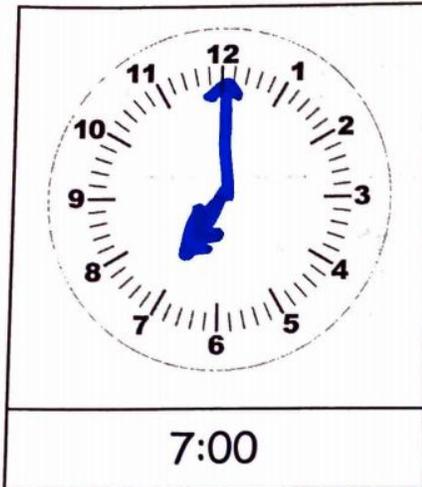


11:30

Half past 11 o'clock

Part 2: Show Time

Show the time on each clock.



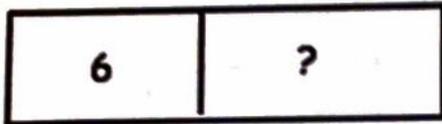
What is something you might do at 7:30 at night?

I take a bath and
get ready for bed.

Part 1: Tape Diagrams with Unknowns

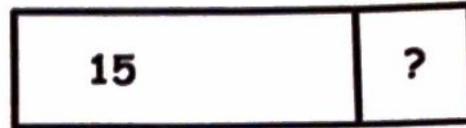
Find the unknown. Write an equation that matches.

14



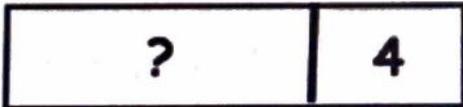
$$6 + 8 = 14$$

18



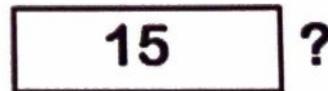
$$15 + 3 = 18$$

15



$$11 + 4 = 15$$

18



$$15 + 3 = 18$$

Part 2: Equations with Unknowns

Circle the equation that matches the story. Solve the problem using ten frames or number lines.

13 oranges were on the table. I ate 6 oranges. How many oranges are on the table now?

$13 - 6 = ?$

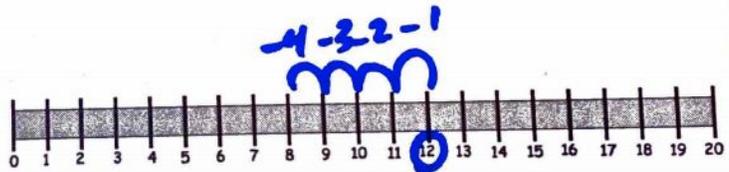
$13 + 6 = ?$



12 grapes are on the table. 4 are red and the rest are green. How many grapes are green?

$4 + ? = 12$

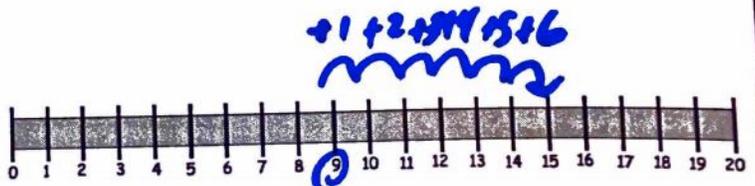
$12 + 4 = ?$



9 turtles were sitting in the pond. Some more turtles came. Then there were 15. How many turtles came?

$9 + 15 = ?$

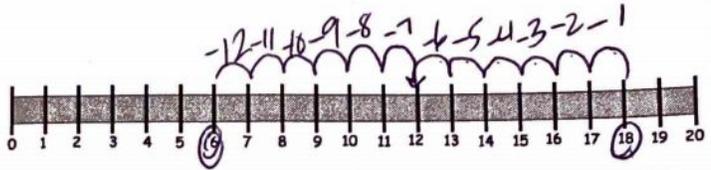
$9 + ? = 15$



19 nuts were on the table. I ate some nuts. Now there were 13 nuts. How many nuts did I eat?

$$18 - ? = 12$$

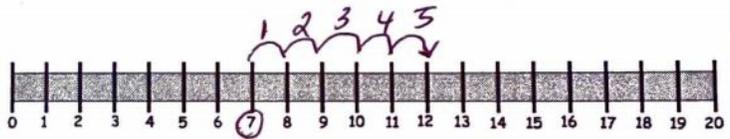
$$18 - 12 = ?$$



Melissa has 7 grapes. Tamara has 12 grapes. How many more grapes does Tamara have than Melissa?

$$7 + ? = 12$$

$$7 + 12 = ?$$



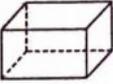
Think of an addition or subtraction situation. Draw a tape diagram that matches and label the parts, including the unknown.

$$6 + ? = 10$$

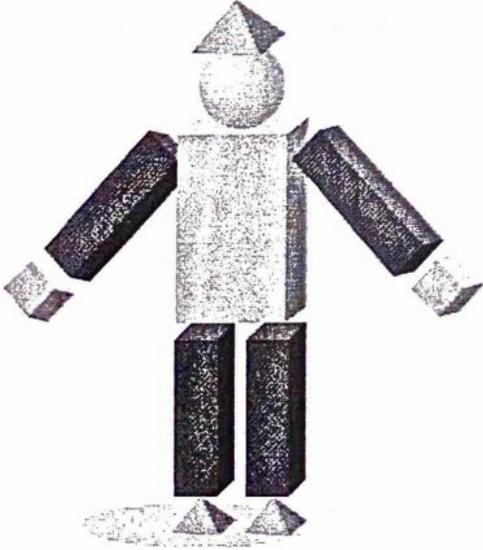
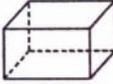
$$6 + 4 = ?$$

Part 1: Identifying shapes

How many of each shape?

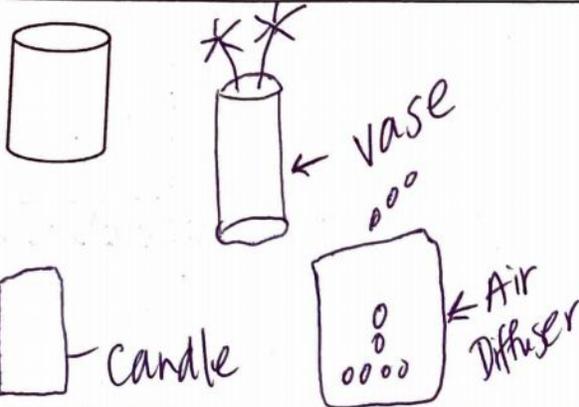
		4
		4
		2
		2

How many of each shape?

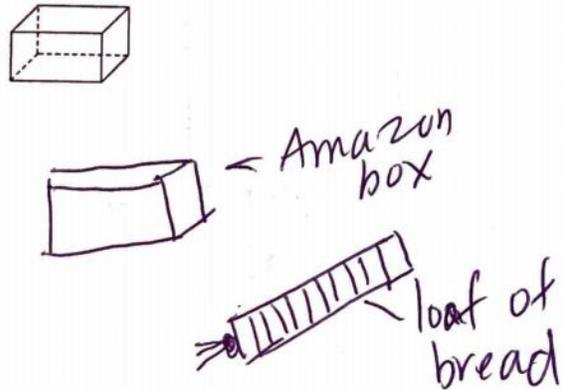
		2
		5
		3
		1

Part 2: Drawing Shapes

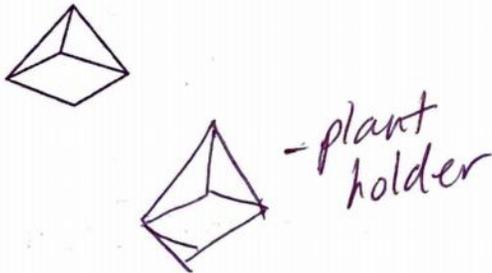
Look for objects that are **cylinder shaped**. Draw and label each object you find.



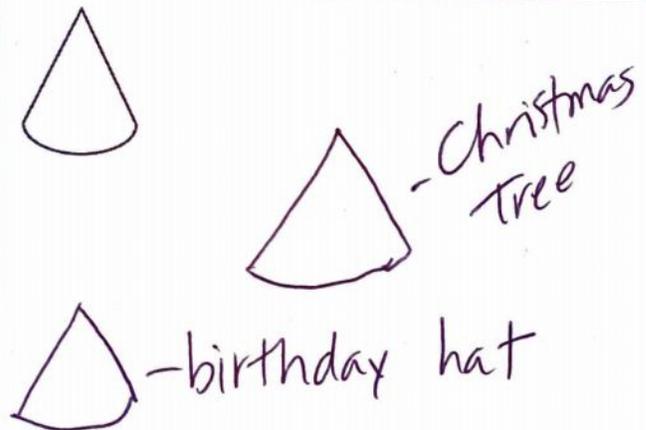
Look for objects that are **rectangular prism shaped**. Draw and label each object you find.



Look for objects that are **square pyramid shaped**. Draw and label each object you find.



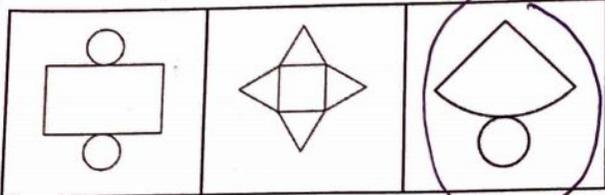
Look for objects that are **cone shaped**. Draw and label each object you find.



Part 3: Faces of 3-D Shapes

Circle the net that makes each shape and tell how you know.

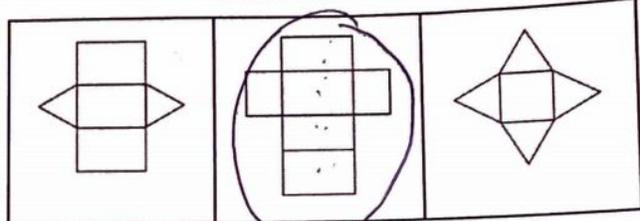
cone



How do you know?

I see the round or curved base.

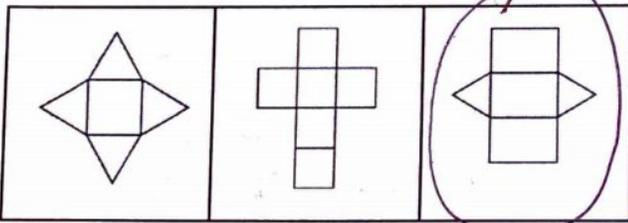
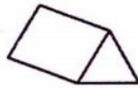
rectangular prism



How do you know?

I counted the rectangular prism has 6 sides.

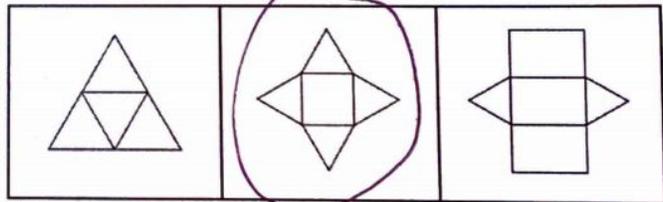
triangular prism



How do you know?

I need pointed sides and a rectangle on the bottom.

square pyramid

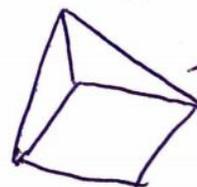


How do you know?

I know the base has to be a square



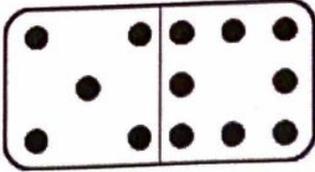
Draw and label your favorite 3-D Shape.



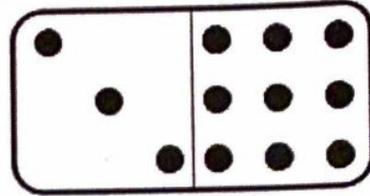
square prism

Part 1: Writing Equations

Use the domino to create addition and subtraction equations.



$$\begin{array}{r} 5 + 8 = 13 \\ \hline 8 + 5 = 13 \\ \hline 13 - 5 = 8 \\ \hline 13 - 8 = 5 \\ \hline \end{array}$$



$$\begin{array}{r} 3 + 9 = 12 \\ \hline 9 + 3 = 12 \\ \hline 12 - 9 = 3 \\ \hline 12 - 3 = 9 \\ \hline \end{array}$$

Write two addition equations that are related to $9 - 5 = \underline{4}$.

$$\begin{array}{r} \underline{4} + \underline{5} = \underline{9} \\ \underline{5} + \underline{4} = \underline{9} \end{array}$$

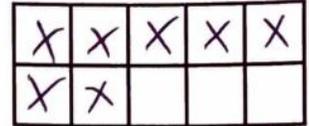
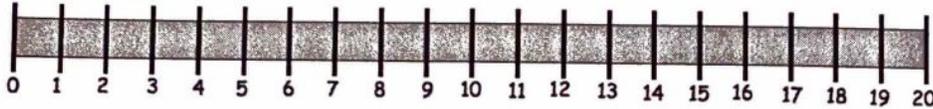
Write two addition equations that are related to $12 - 7 = \underline{5}$.

$$\begin{array}{r} \underline{7} + \underline{5} = \underline{12} \\ \underline{5} + \underline{7} = \underline{12} \end{array}$$

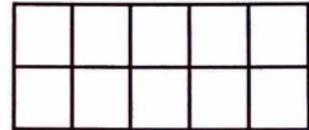
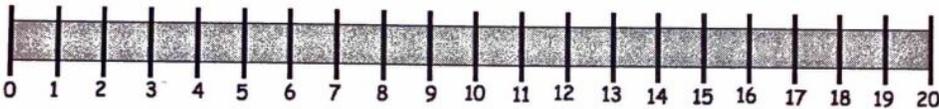
Part 2: True or False?

Circle the facts that are true, and show how you know using the number lines or ten frames.

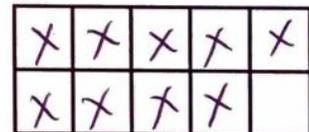
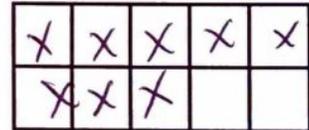
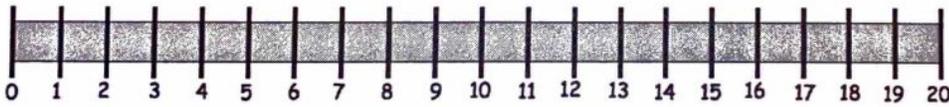
14 = 7 + 7



14 + 1 = 13



8 + 9 = 17



Find the false equation. Turn it into a true equation.

10 - 1 = 11 $10 + 1 = 11$

$6 = 13 - 7$

$17 - 8 = 9$

$10 + 1 = 11$

$4 = 8 - 4$

20 - 10 = 11 $20 - 10 = 10$

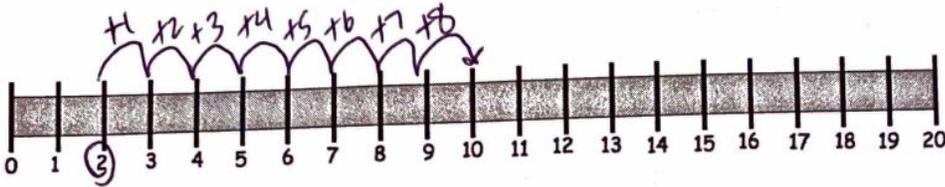
$15 - 8 = 7$

$20 - 10 = 10$

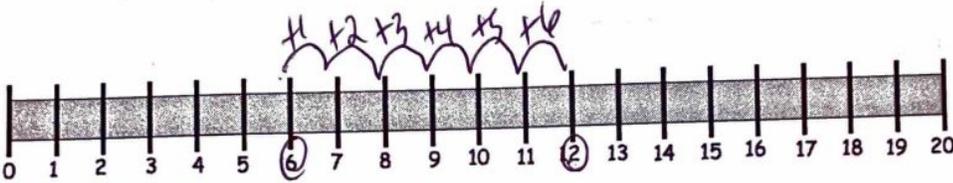
Part 3: Unknowns

Fill in the unknowns to make the equations true. You may use the number lines or ten frames to help you.

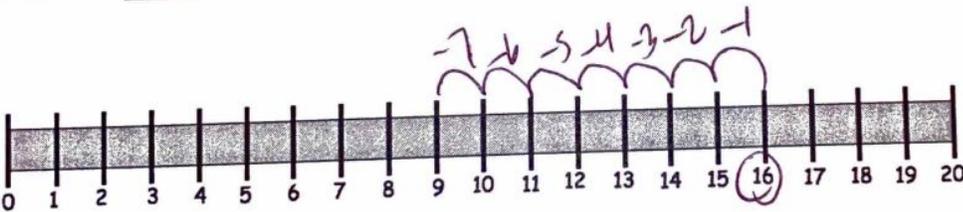
$$\underline{2} + 8 = 10$$



$$12 = 6 + \underline{6}$$



$$16 - \underline{7} = 9$$





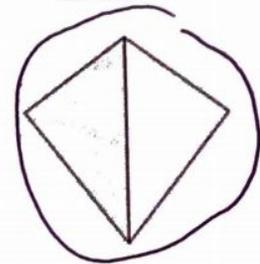
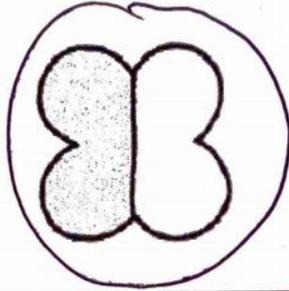
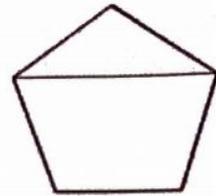
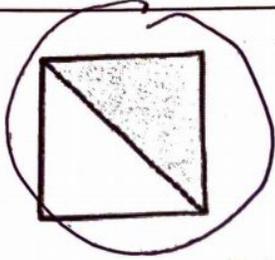
Write one addition and one subtraction equation that equal 15.

$$10 + 5 = 15$$

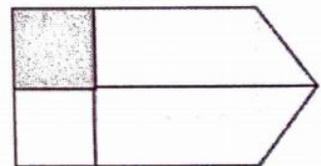
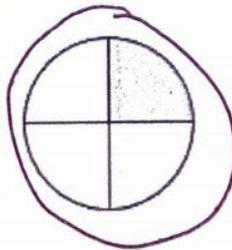
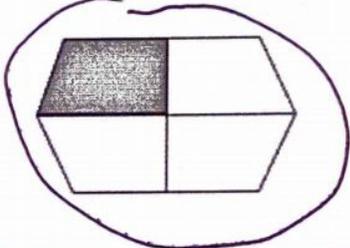
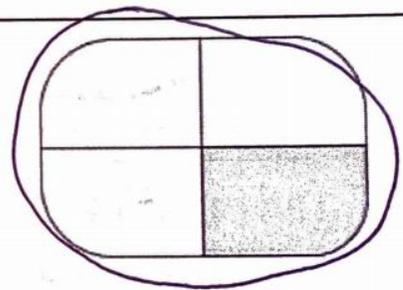
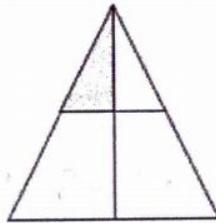
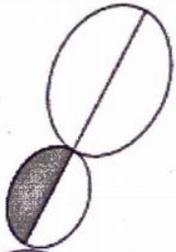
$$20 - 5 = 15$$

Part 1: Identify Halves and Fourths

Circle the shape that is half shaded.

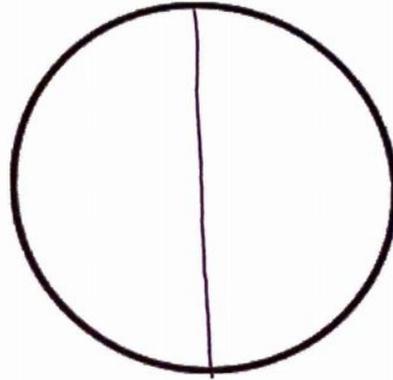
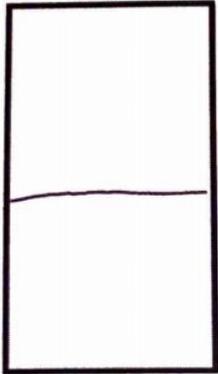
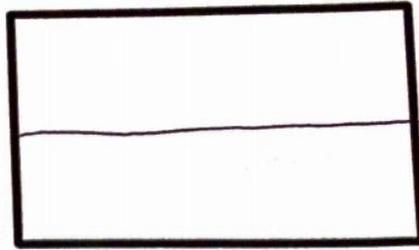
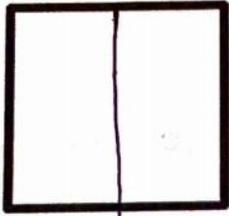


Circle the shape that is one fourth shaded.

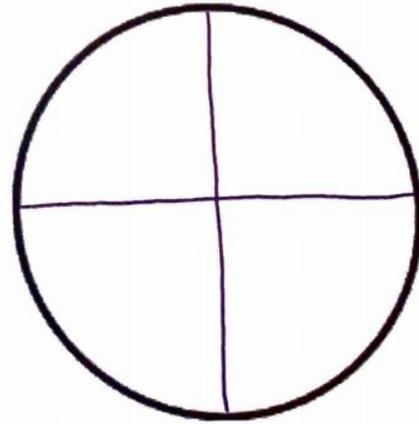
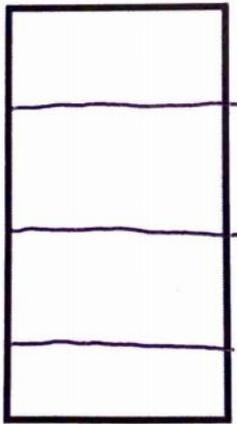
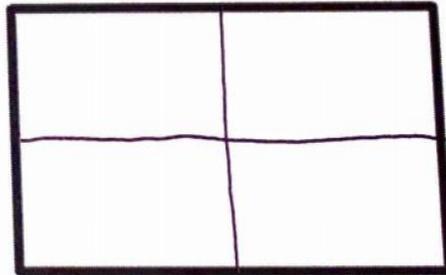
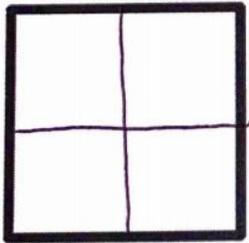


Part 2: Partition into Halves and Fourths

Draw a line to cut each shape into 2 halves.



Draw lines to cut each shape into 4 quarters (fourths).





If you have a piece of paper, fold it into fourths in *two* different ways.

Draw a picture of your paper and the different folds.

