

Eureka Math

First Grade Module 4 Lesson 9

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Directions for customizing presentations are available on the next slide.

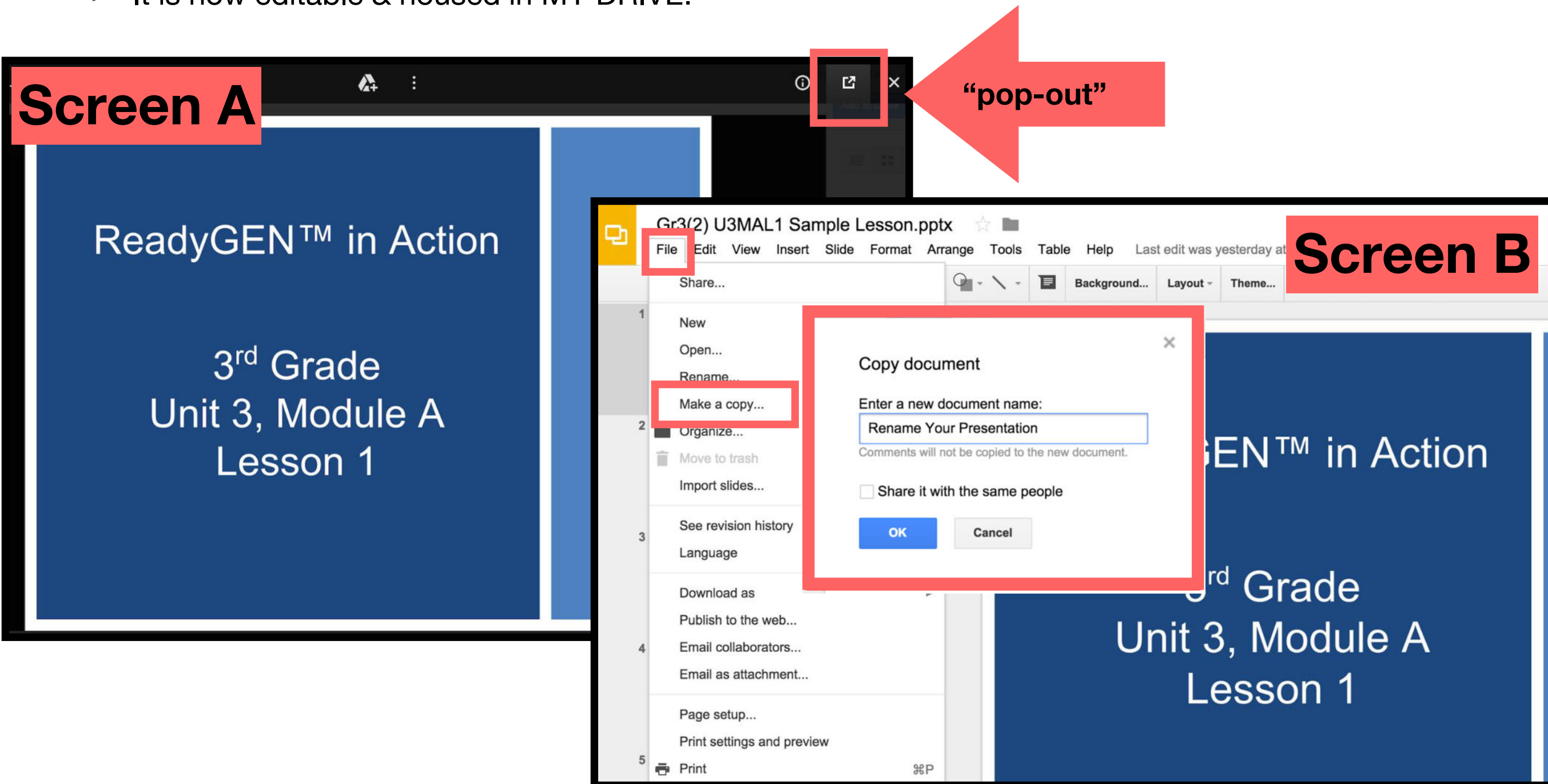


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Customize this Slideshow

Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.



Icons



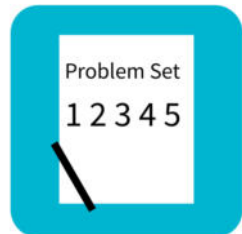
Read, Draw, Write



Learning Target



Personal White Board



Problem Set



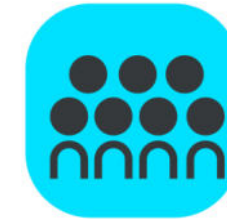
Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



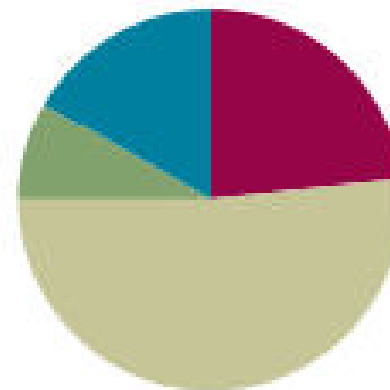
Small Group Time

Lesson 9

Objective: Use the symbols $>$, $=$, and $<$ to compare quantities and numerals.

Suggested Lesson Structure

■ Fluency Practice	(14 minutes)
■ Application Problem	(5 minutes)
■ Concept Development	(31 minutes)
■ Student Debrief	(10 minutes)
Total Time	(60 minutes)





Materials Needed

- S: Core Subtraction Fluency Review (Lesson 8 Core Subtraction Fluency Review)
- T/S: Personal white board, place value chart (Lesson 2 Template 2)
- S: Personal white board
- T: Double-sided alligator card (Template), comparison cards (Lesson 8 Template)
- S: Comparison cards (Lesson 8 Template), personal white board



I can use symbols $<$, $>$, $=$ to compare quantities and numerals.



Core Subtraction Fluency Review (5min.)

A STORY OF UNITS

Lesson 8 Core Subtraction Fluency Review

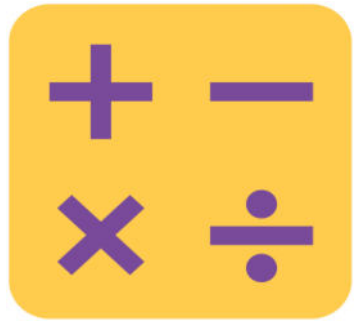
1•4

Name _____ Date _____

Core Subtraction Fluency Review

- | | | |
|---------------------------------|----------------------------------|----------------------------------|
| 1. $8 - 0 = \underline{\quad}$ | 16. $9 - 3 = \underline{\quad}$ | 31. $5 - 5 = \underline{\quad}$ |
| 2. $8 - 1 = \underline{\quad}$ | 17. $10 - 3 = \underline{\quad}$ | 32. $6 - 5 = \underline{\quad}$ |
| 3. $7 - 7 = \underline{\quad}$ | 18. $10 - 4 = \underline{\quad}$ | 33. $7 - 5 = \underline{\quad}$ |
| 4. $3 - 3 = \underline{\quad}$ | 19. $10 - 2 = \underline{\quad}$ | 34. $8 - 5 = \underline{\quad}$ |
| 5. $3 - 2 = \underline{\quad}$ | 20. $10 - 8 = \underline{\quad}$ | 35. $8 - 4 = \underline{\quad}$ |
| 6. $4 - 2 = \underline{\quad}$ | 21. $10 - 7 = \underline{\quad}$ | 36. $10 - 5 = \underline{\quad}$ |
| 7. $5 - 2 = \underline{\quad}$ | 22. $10 - 6 = \underline{\quad}$ | 37. $9 - 5 = \underline{\quad}$ |
| 8. $5 - 3 = \underline{\quad}$ | 23. $6 - 6 = \underline{\quad}$ | 38. $9 - 4 = \underline{\quad}$ |
| 9. $9 - 2 = \underline{\quad}$ | 24. $7 - 7 = \underline{\quad}$ | 39. $6 - 3 = \underline{\quad}$ |
| 10. $8 - 2 = \underline{\quad}$ | 25. $7 - 6 = \underline{\quad}$ | 40. $6 - 4 = \underline{\quad}$ |
| 11. $7 - 2 = \underline{\quad}$ | 26. $8 - 8 = \underline{\quad}$ | 41. $7 - 3 = \underline{\quad}$ |
| 12. $4 - 4 = \underline{\quad}$ | 27. $8 - 7 = \underline{\quad}$ | 42. $7 - 4 = \underline{\quad}$ |
| 13. $4 - 3 = \underline{\quad}$ | 28. $9 - 9 = \underline{\quad}$ | 43. $8 - 6 = \underline{\quad}$ |
| 14. $5 - 4 = \underline{\quad}$ | 29. $9 - 8 = \underline{\quad}$ | 44. $9 - 6 = \underline{\quad}$ |
| 15. $8 - 3 = \underline{\quad}$ | 30. $10 - 9 = \underline{\quad}$ | 45. $9 - 7 = \underline{\quad}$ |

Students
complete as
many
problems as
they can in
three
minutes.



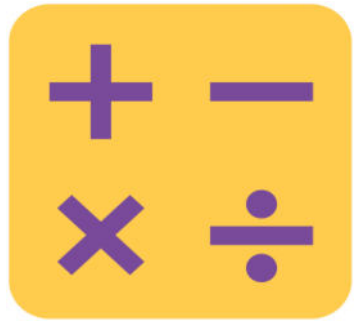
Digit Detective

I'm going to write a number on my whiteboard and I'll give you clues to guess my number.

Clue: The digit in the tens place is 2. The digit in the ones place is 3.

What's my number?

23

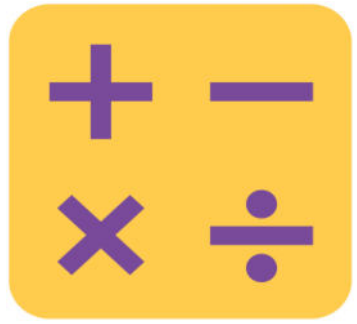


Digit Detective

23

What's the value of the 2?

20



Digit Detective

23

What's the value of the 3?

3

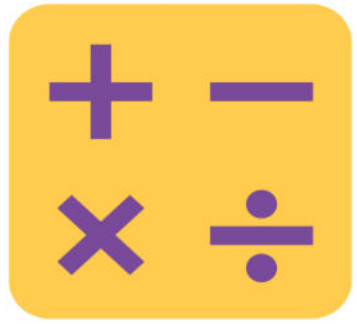


Digit Detective

Clue: The digit in the tens place is 1 more than 2. The digit in the ones place is 1 less than 2.

What's my number?

31

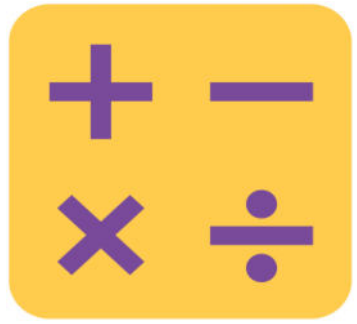


Digit Detective

31

What's the value of the 3?

30

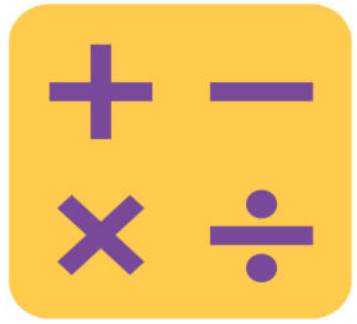


Digit Detective

31

What's the value of the 1?

1

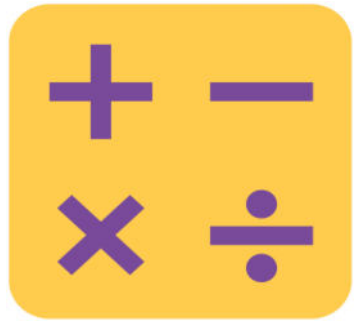


Digit Detective

Clue: The digit in the ones place is equal to $8 - 4$. The digit in the tens place is equal to $9 - 7$.

What's my number?

24

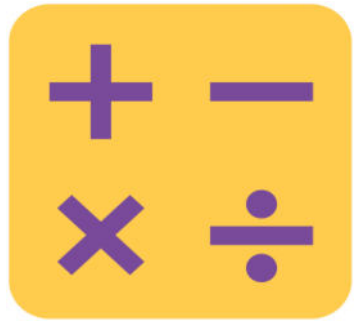


Digit Detective

24

What's the value of the 2?

20

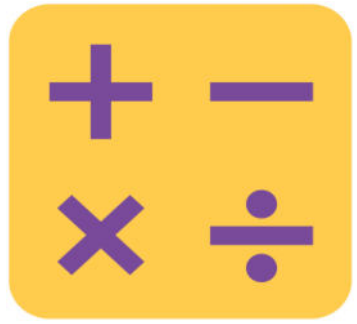


Digit Detective

24

What's the value of the 4?

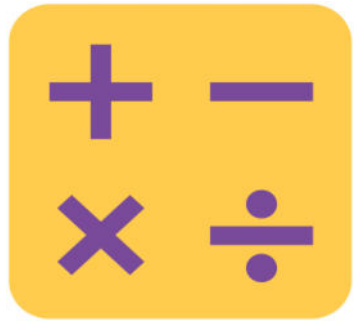
4



Sequence Sets of Numbers (5 min.)

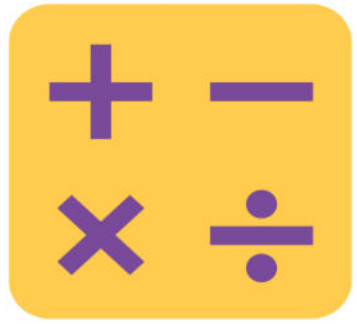
23, 13, 32, 22

- How could you use the words greater than or less than to compare 32 and 23?
- Which number has the same digit in the tens place and ones place?
- Which two numbers have the same digit in the tens place?
- Which two numbers have the same digit in the ones place?
- Which number is less than 23?



Sequence Sets of Numbers (5 min.)

13, 11, 31, 1



Sequence Sets of Numbers (5 min.)

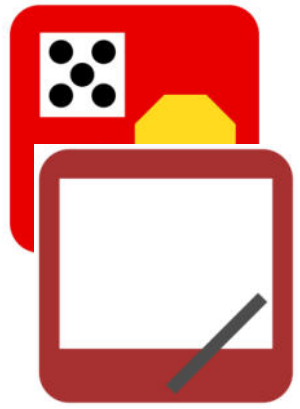
38, 18, 25, 35



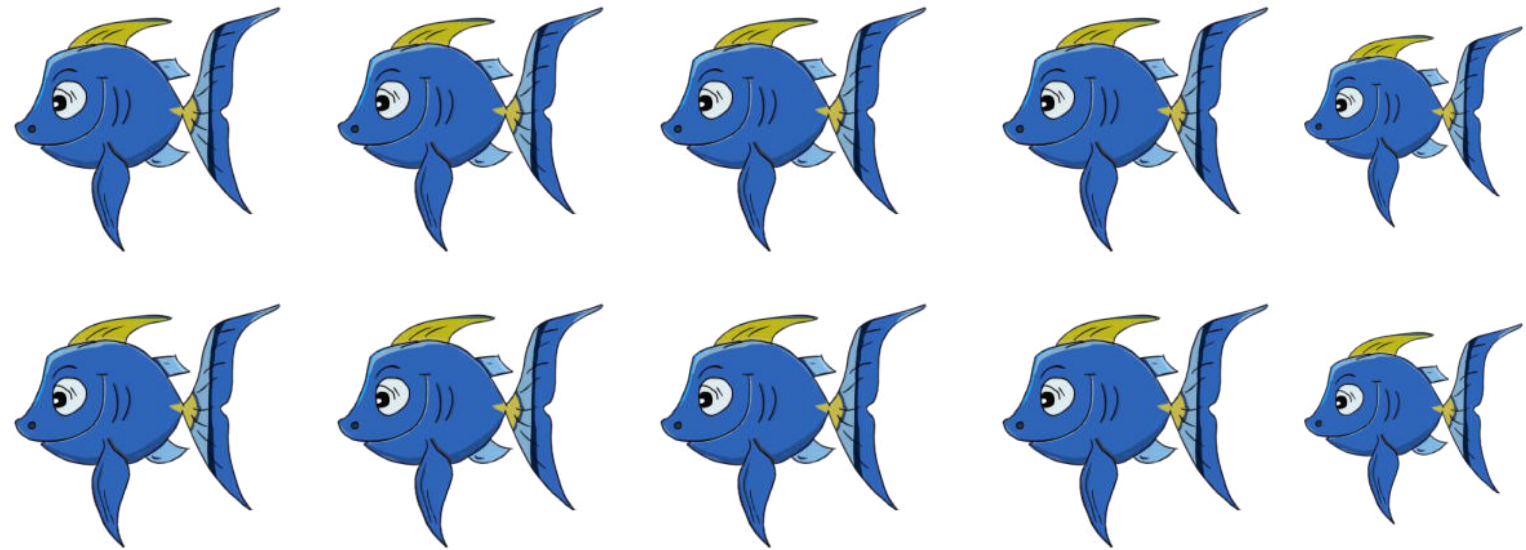
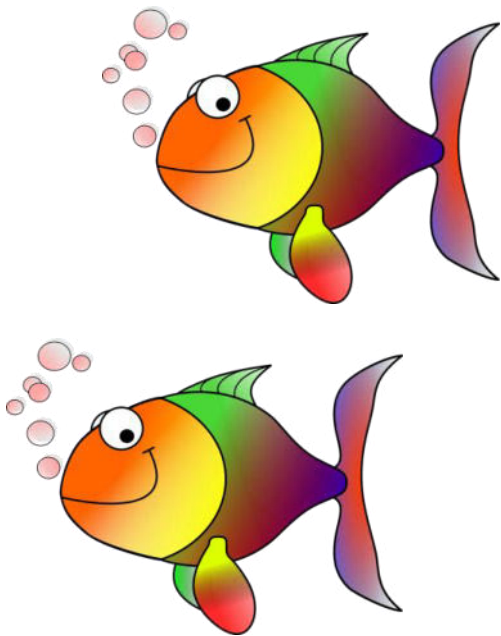
Application Problem

Carl has a collection of rocks. He collects 10 more rocks. Now he has 31 rocks. How many rocks did he have in the beginning?

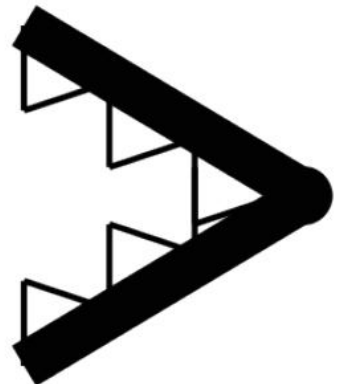
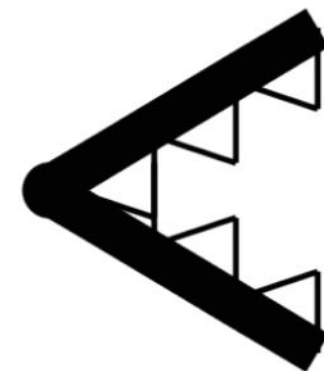
- a. Use *place value charts* to show how many rocks Carl had at the beginning.
- b. Write a statement comparing how many rocks Carl started and ended with, using one of these phrases: greater than, less than, or equal to.

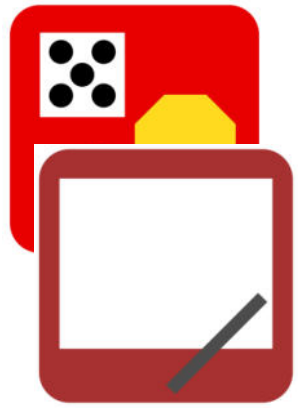


Concept Development

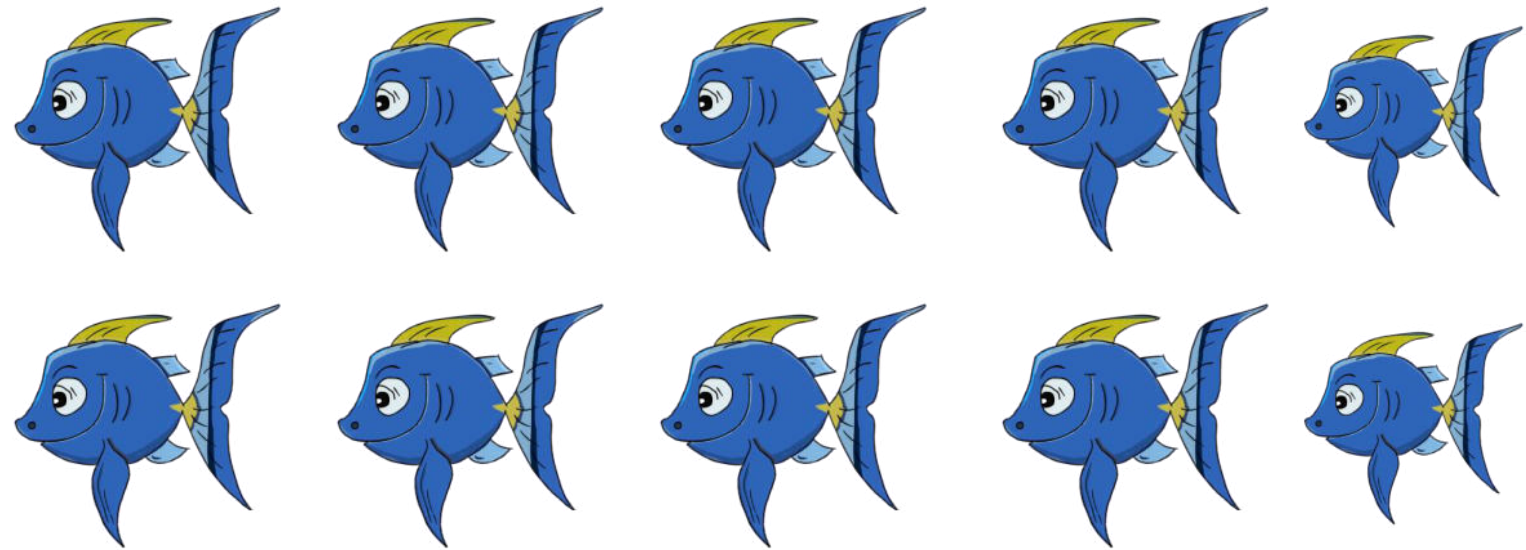
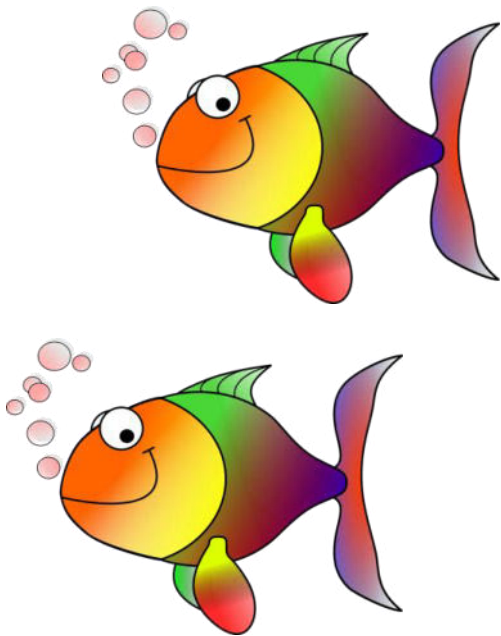


Would this hungry alligator
rather eat 2 fish or 10 fish
for dinner?

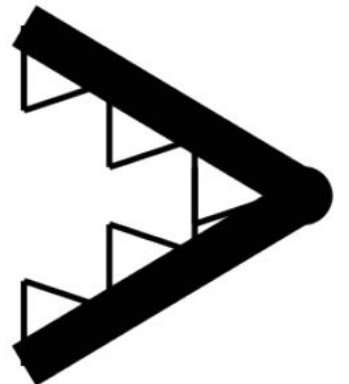
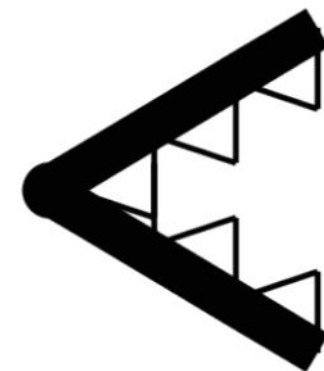


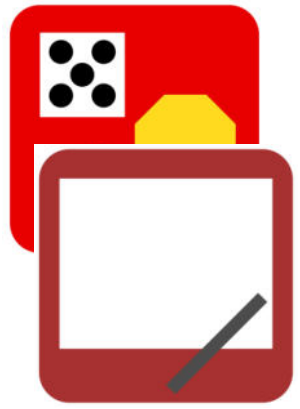


Concept Development

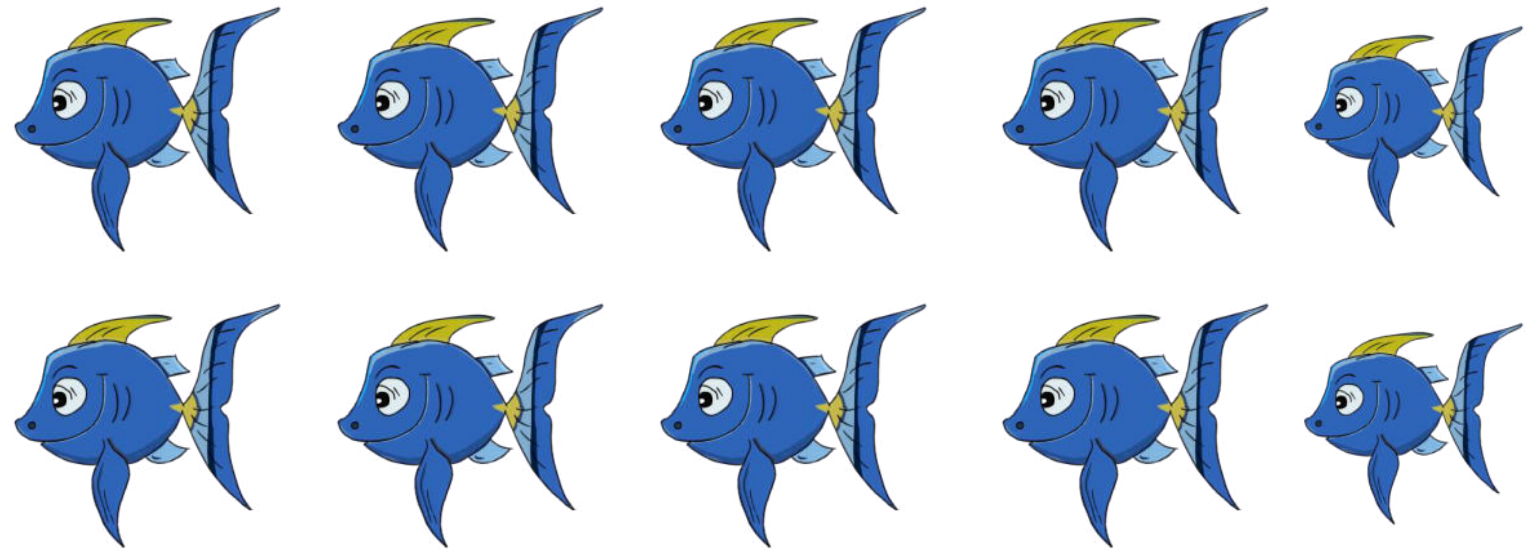
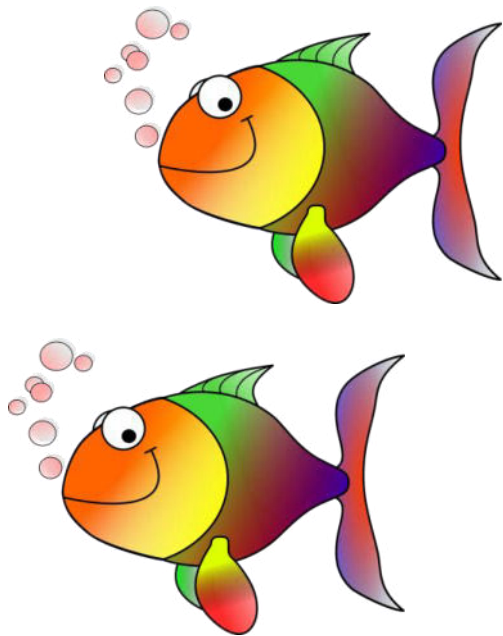


Why would he rather eat
the group of 10 fish?

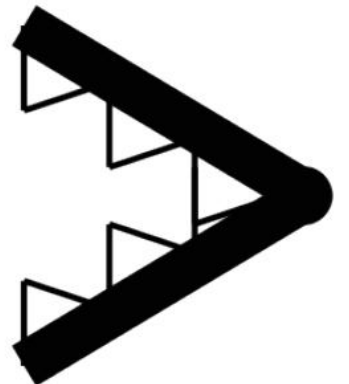
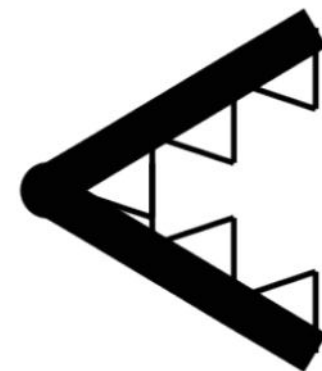


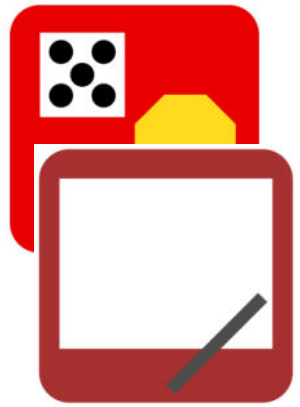


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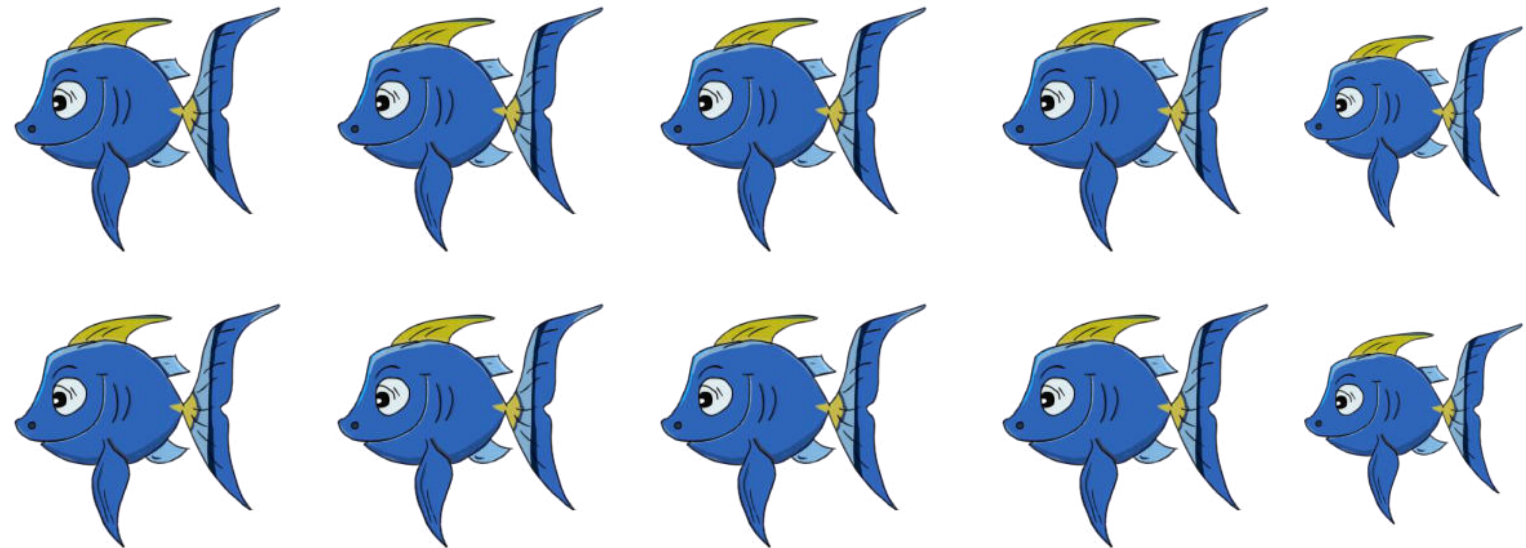
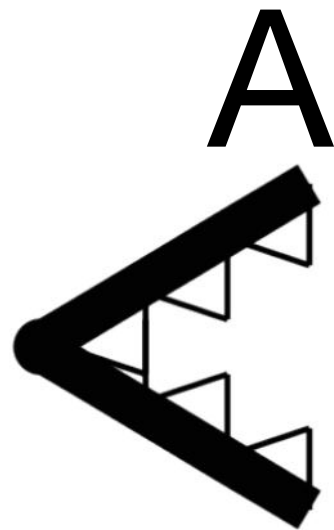
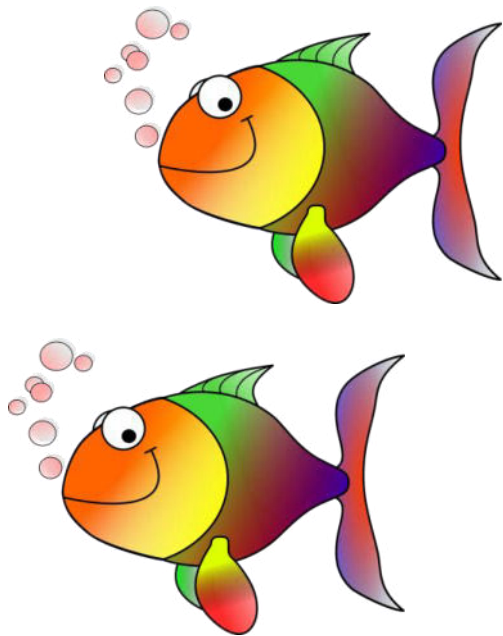


Yes, terrific. What would we say if we started comparing the numbers from the left, starting with the number 2?

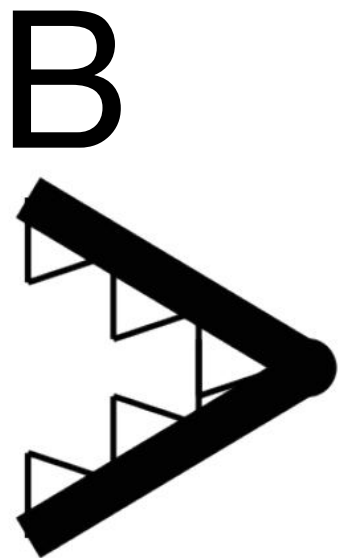


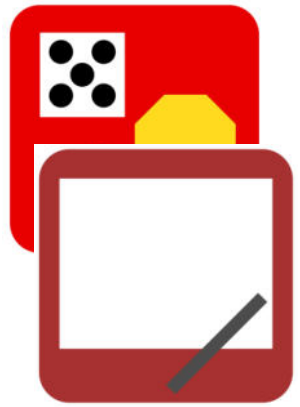


Concept Development

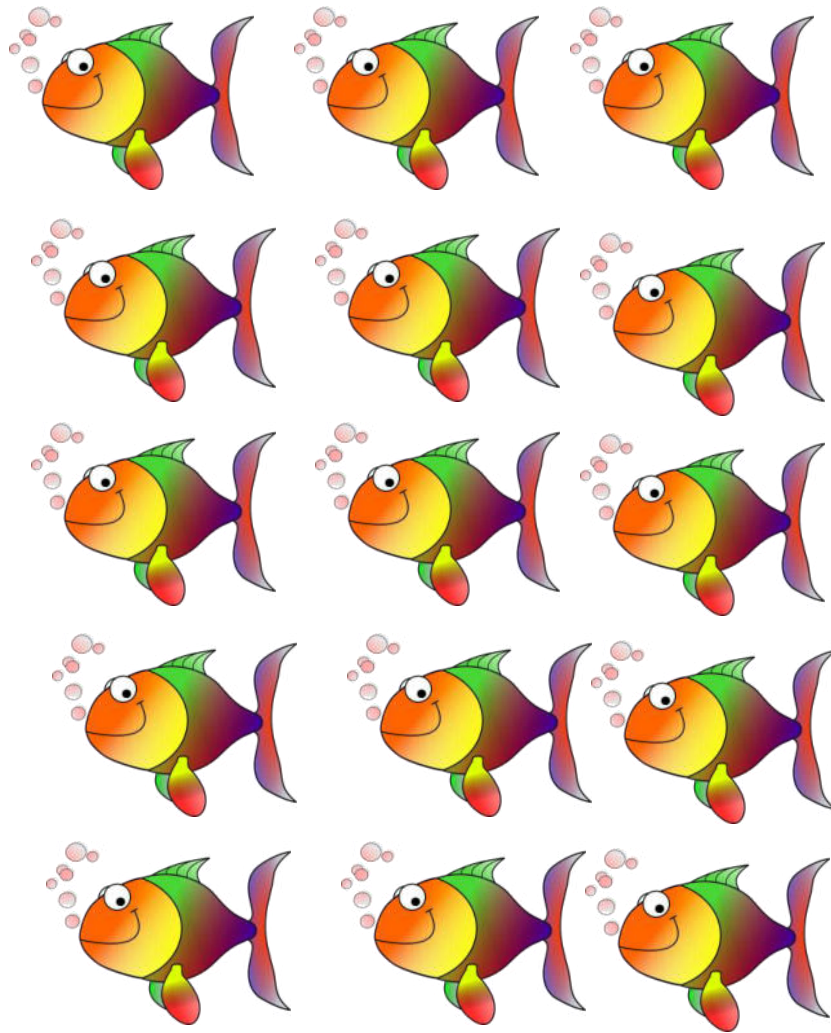


Yes 2 is less than 10!

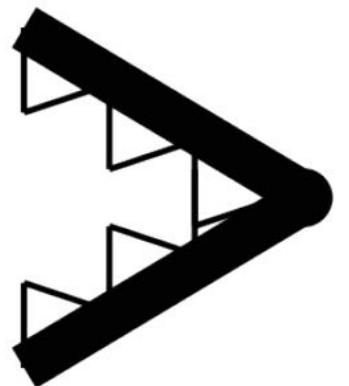
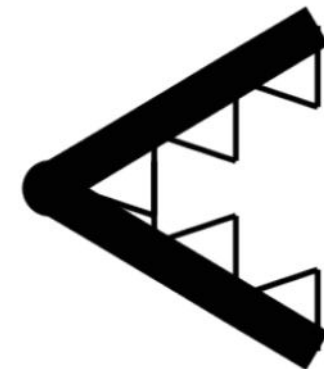
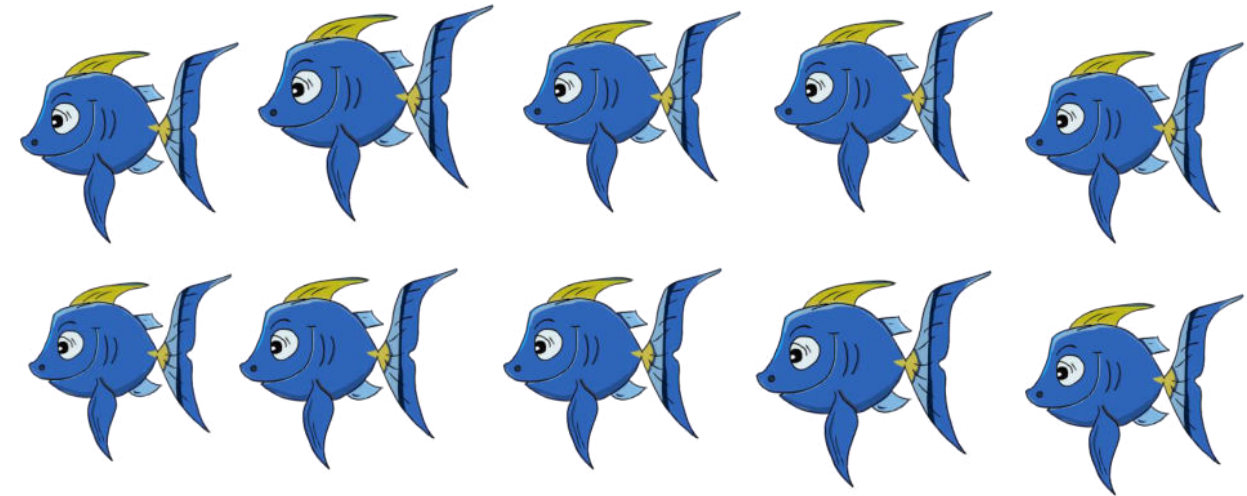


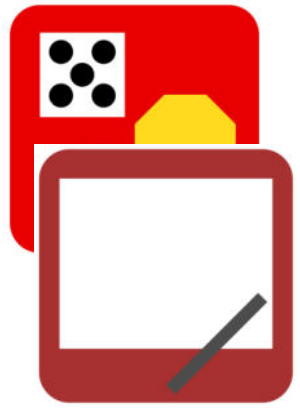


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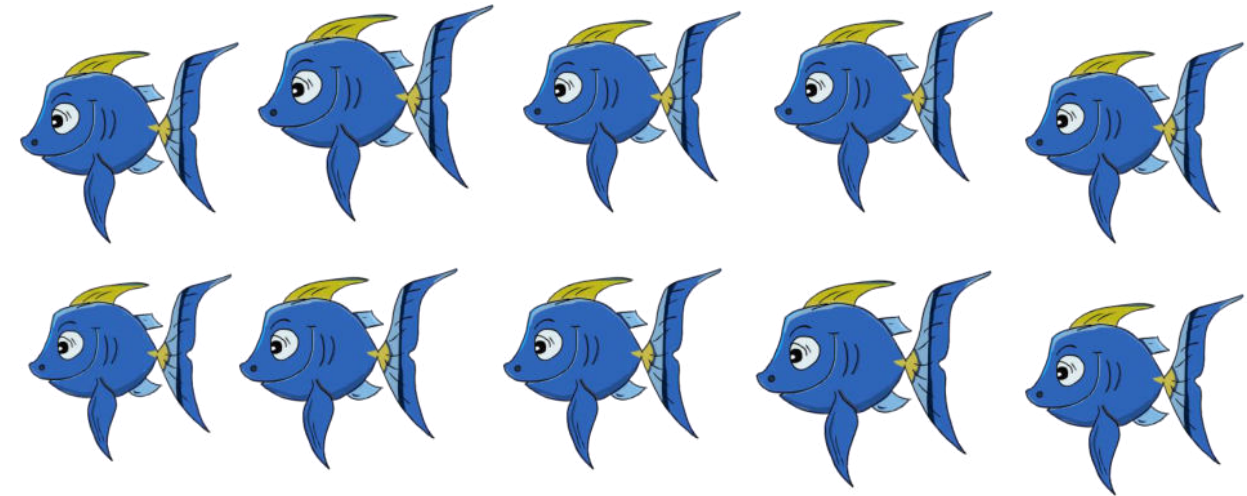
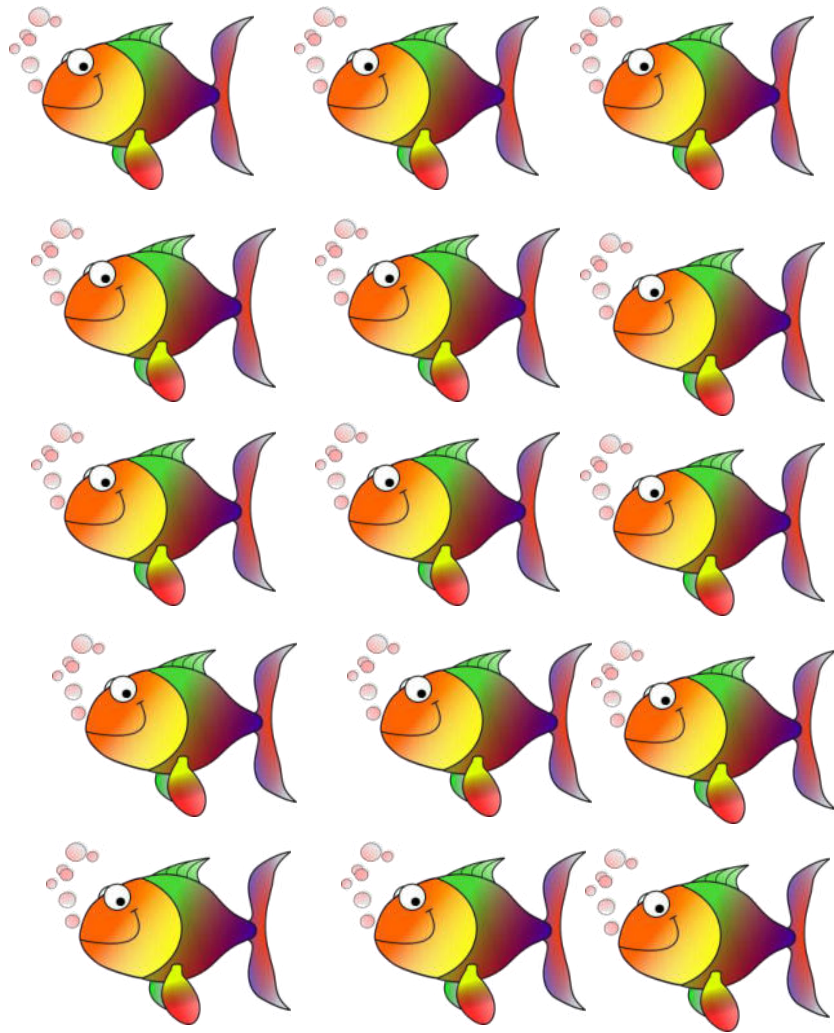


Yes the group of 15 fish!
Why?

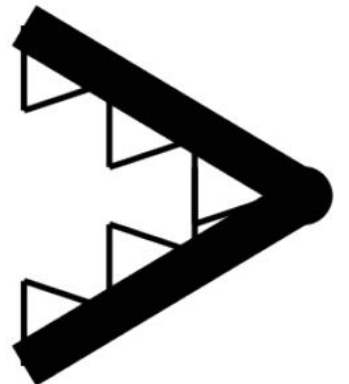
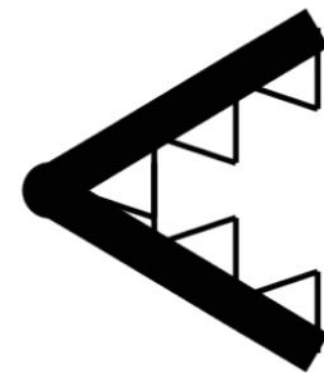




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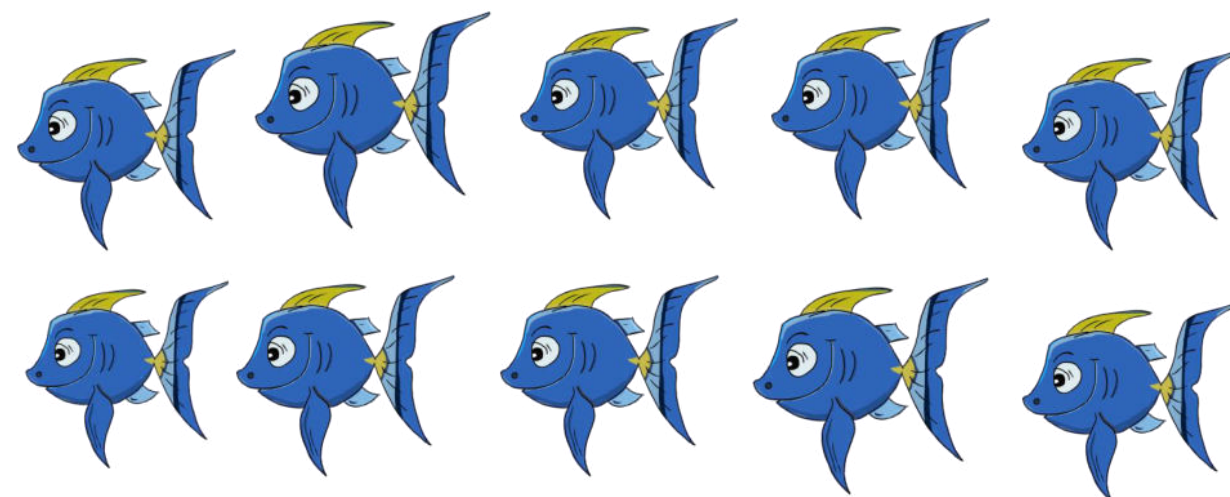


Which group of fish will the hungry alligator want to eat this time?

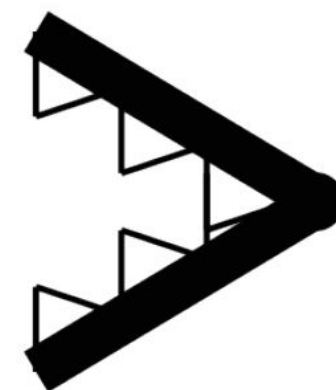
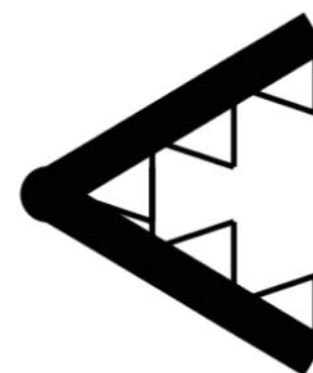




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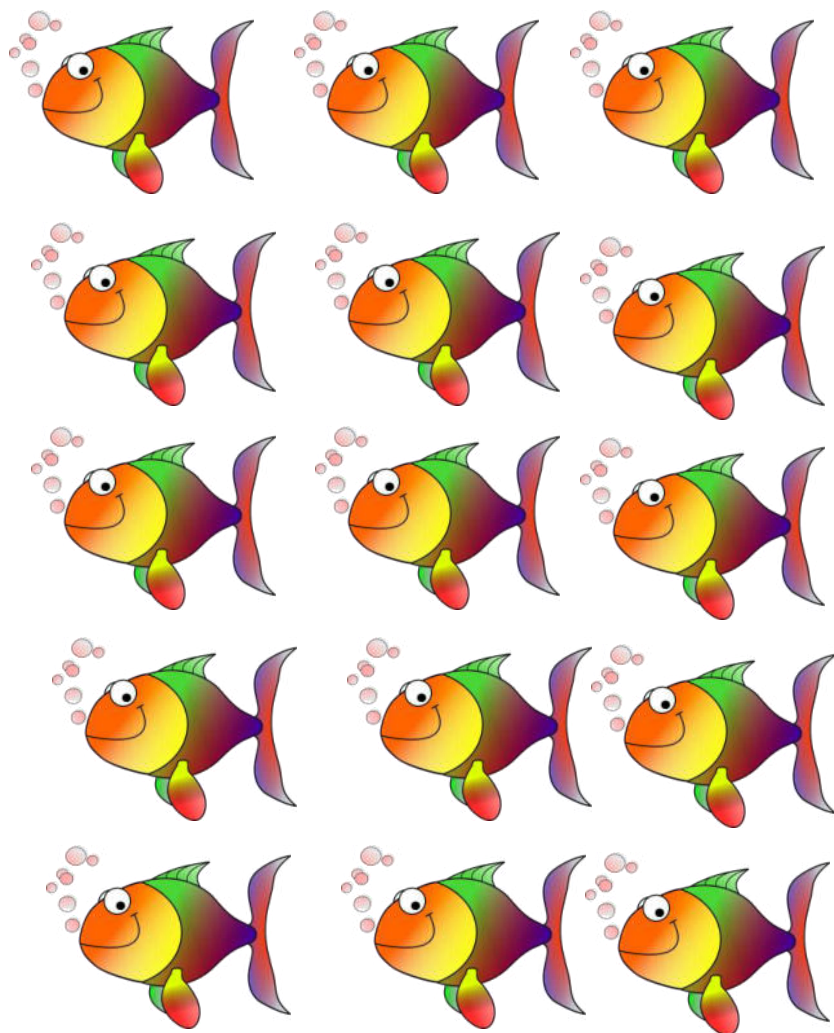


Show or explain how you know that.

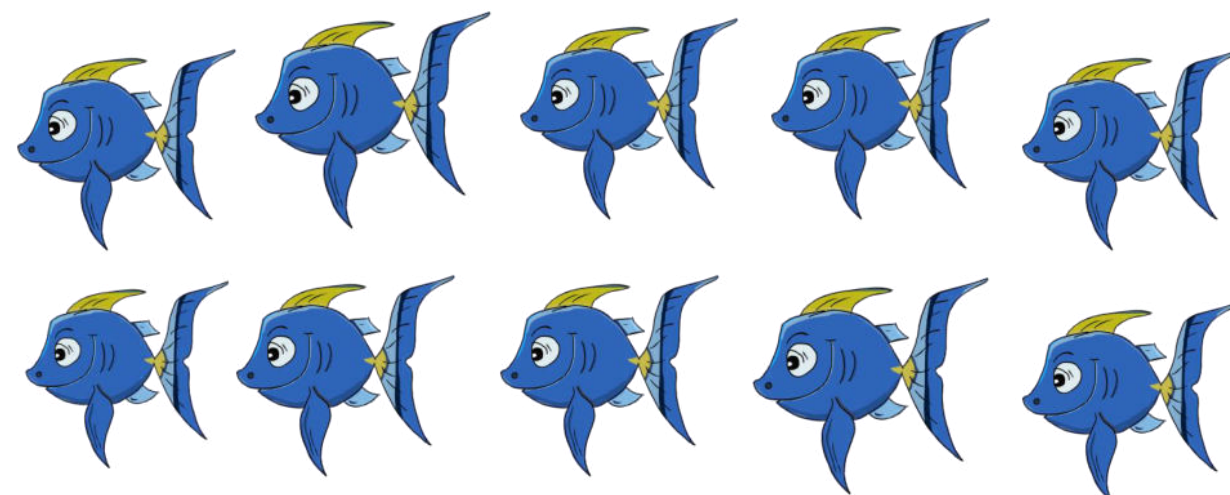
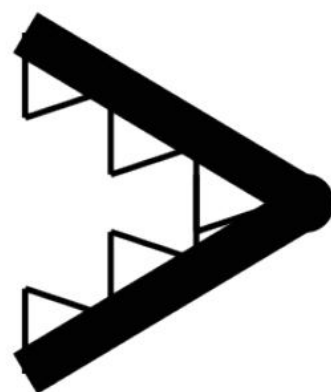




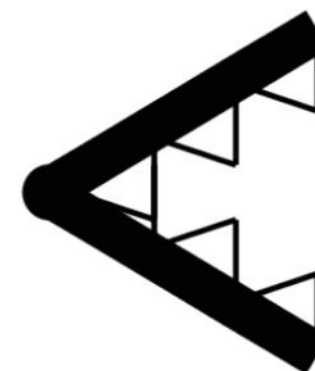
Concept Development

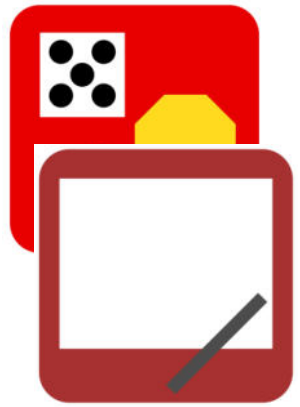


B



A



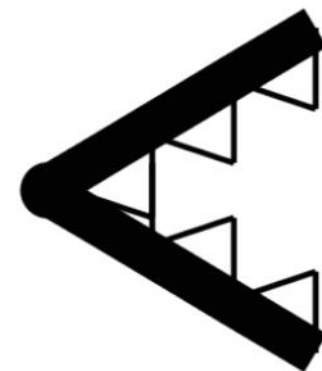


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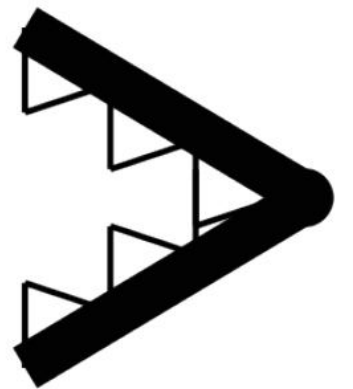
1 ten

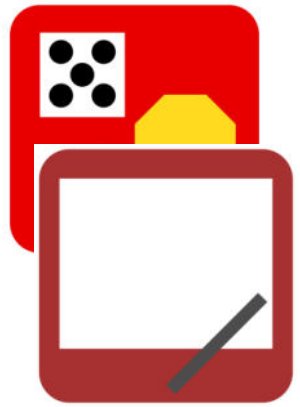
1 ten 6 ones

A



B



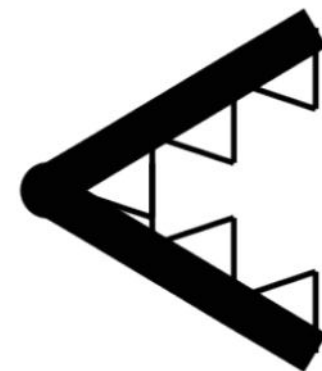


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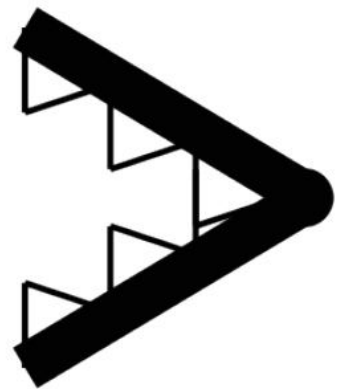
30

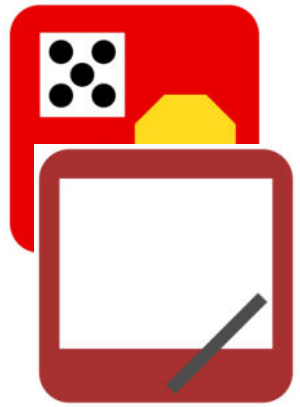
20

A



B



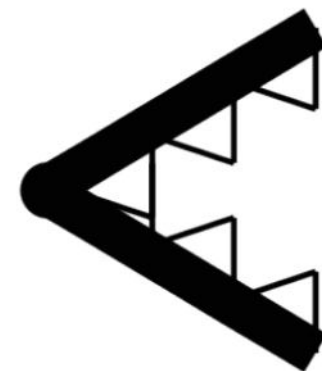


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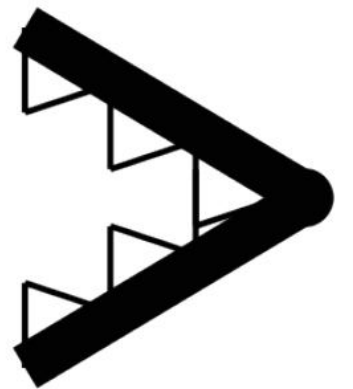
4 tens

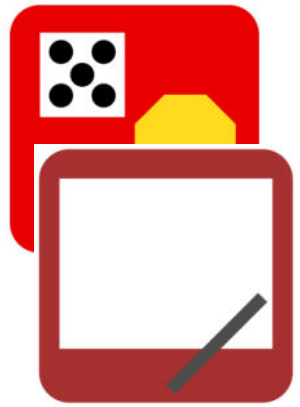
3 tens 8 ones

A



B



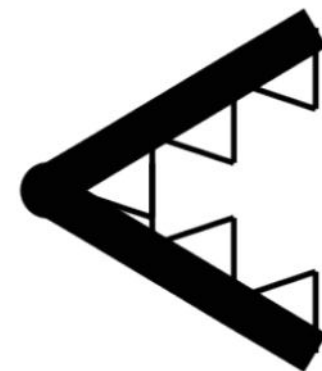


Concept Development

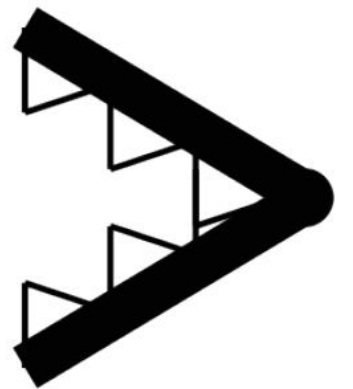
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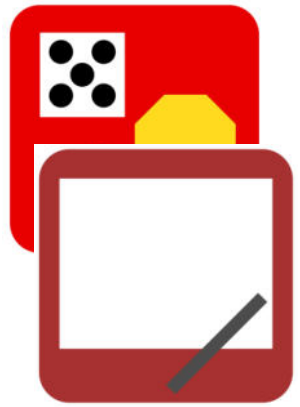
32

A



B



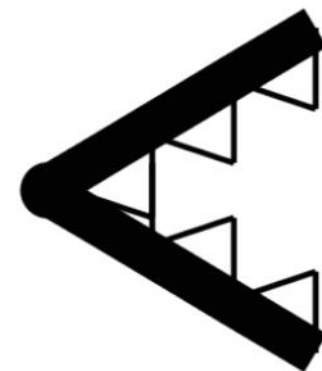


Concept Development

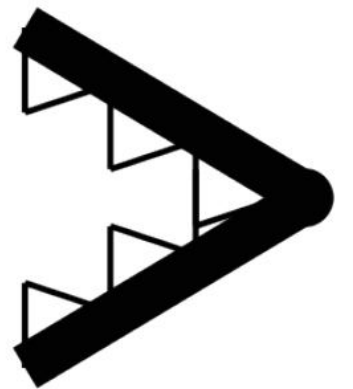
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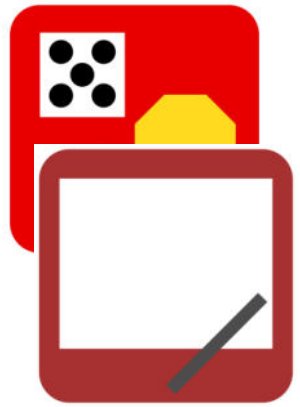
40

A



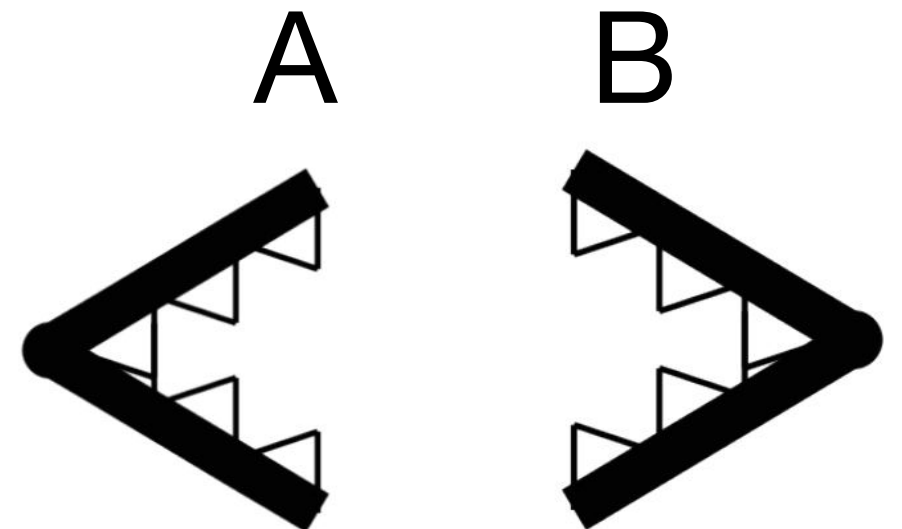
B

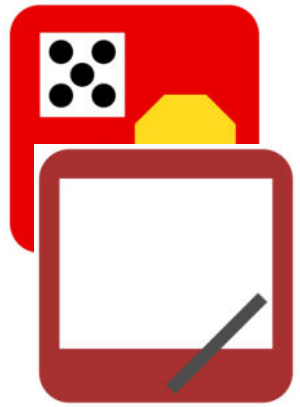




Concept Development

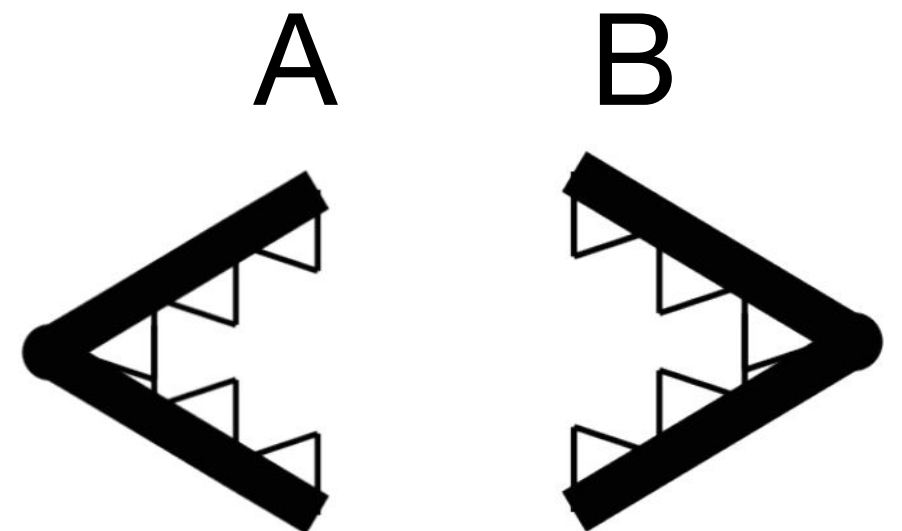
Now, it's your turn to do this with a partner. Take out your comparison cards. Hold up the card that says less than.

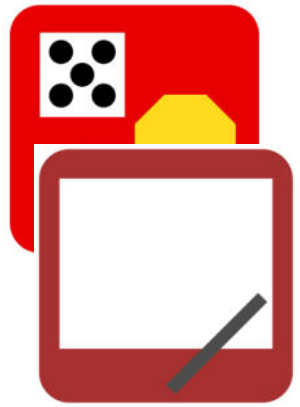




Concept Development

Turn the card over. The wavy water lines should be at the bottom of your card. You will see a part of the alligator's mouth. If you'd like, use a yellow colored pencil to add some teeth to your alligator's mouth.

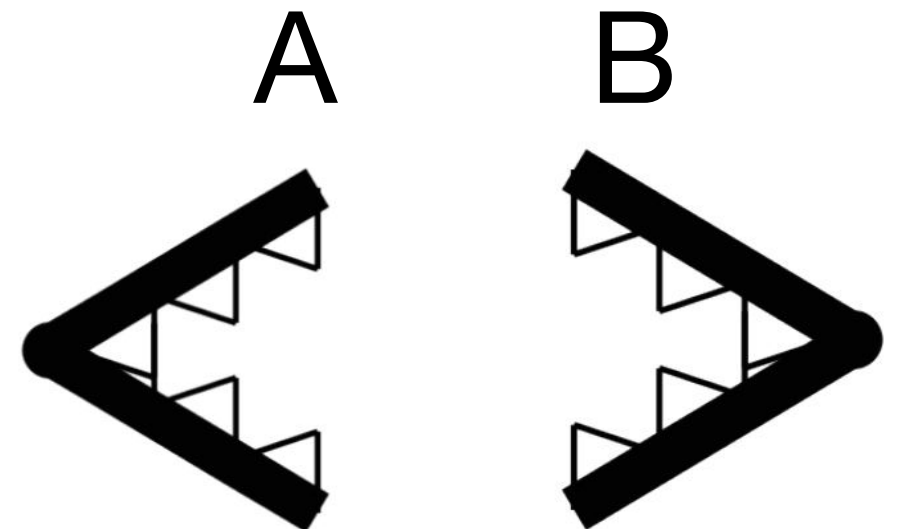


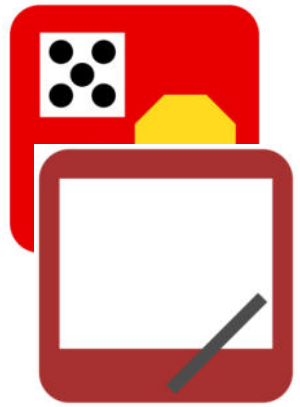


Concept Development

Turn the card over. The wavy water lines should be at the bottom of your card. You will see a part of the alligator's mouth. If you'd like, use a yellow colored pencil to add some teeth to your alligator's mouth.

Repeat with the *greater than* card.

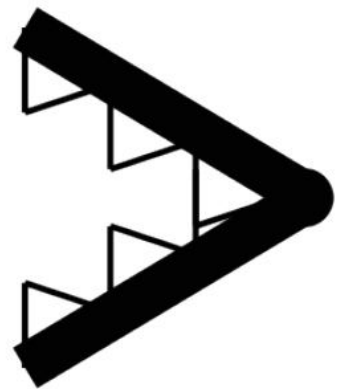
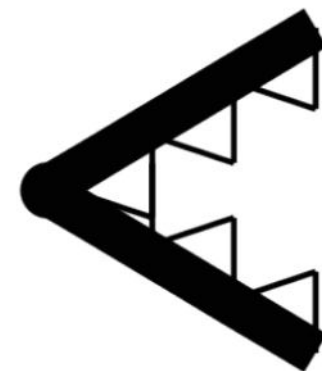




Concept Development

Now, we're ready to play Compare It!

Each of you will write a number from 0 to 40 on your personal white board, without showing your partner. When you are both ready, put them down next to each other. For the first round, Partner A uses her comparison cards to put the alligator picture between the boards, always having the alligator's mouth open to the greater number. Then, Partner B will read the expression from left to right. Each round will last one minute. The object of the game is to see how many different comparisons you can make within each round. You can use tally marks to keep track.





Problem Set

A STORY OF UNITS

Lesson 9 Problem Set

1•4

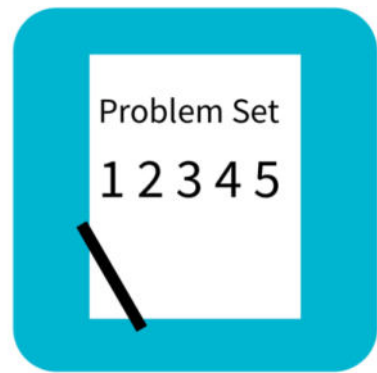
Name _____ Date _____

1. Circle the alligator that is eating the *greater* number.

a. 40  20 	b. 10  30 	c. 18  14 	d. 19  36 
--	--	--	--

2. Write the numbers in the blanks so that the alligator is eating the *greater* number.
With a partner, compare the numbers out loud, using *is greater than*, *is less than*, or *is equal to*. Remember to start with the number on the left.

a. 24 4 ____  ____	b. 38 36 ____  ____	c. 15 14 ____  ____
d. 20 2 ____  ____	e. 36 35 ____  ____	f. 20 19 ____  ____
g. 31 13 ____  ____	h. 23 32 ____  ____	i. 21 12 ____  ____



Problem Set

A STORY OF UNITS

Lesson 9 Problem Set

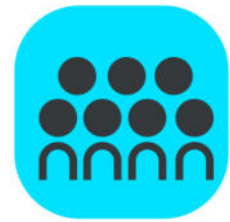
1•4

3. If the alligator is eating the *greater* number, circle it. If not, redraw the alligator.

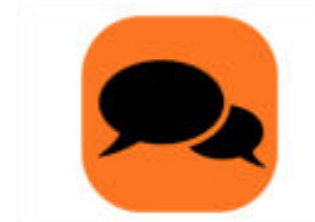
a.	20		19
b.	32		23

4. Complete the charts so that the alligator is eating a *greater* number.

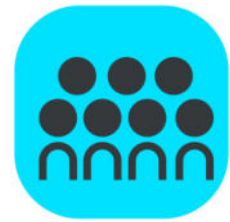
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f.	<table border="1"><tr><td>tens</td><td>ones</td></tr><tr><td>2</td><td>4</td></tr></table>	tens	ones	2	4		<table border="1"><tr><td>tens</td><td>ones</td></tr><tr><td></td><td>4</td></tr></table>	tens	ones		4
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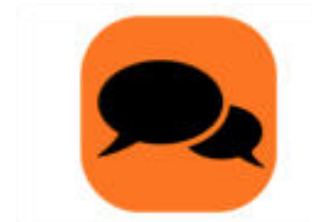
Debrief



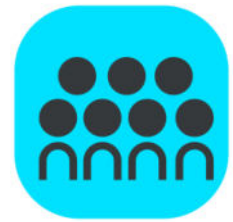
- Compare your answer to Problem 4(a) with your partner's. Did you and your partner come up with the same answer? Can there be more than one answer? Are there other problems that can have more than one answer? Why?



Debrief



- Compare your answer to Problem 4(j) with your partner's. Did you and your partner come up with the same answer? Can there be only one answer? Are there other problems that can only have one answer? Why?



Debrief



- What new math symbols did we use today to compare different numbers? ($>$ for greater than, $<$ for less than.)
- Look at your statement to today's Application Problem. Rewrite your statement using only numbers and a symbol.



Exit Ticket

A STORY OF UNITS

Lesson 9 Exit Ticket

1•4

Name _____ Date _____

Write the numbers in the blanks so that the alligator is eating the greater number.
Read the number sentence, using *is greater than*, *is less than*, or *is equal to*. Remember
to start with the number on the left.

a. 12 10 ____ > ____	b. 22 24 ____ < ____	c. 17 25 ____ > ____
d. 13 3 ____ > ____	e. 27 28 ____ > ____	f. 30 21 ____ < ____
g. 12 21 ____ > ____	h. 31 13 ____ < ____	i. 32 23 ____ < ____