Today's Materials

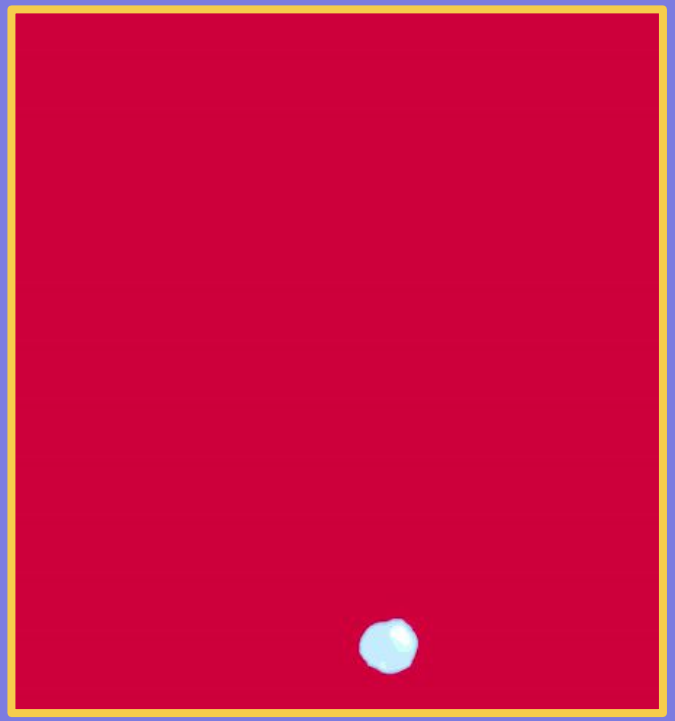
- device
- calculator
- pencil
- notebook
- glue

Reasoning about Contexts with Tape Diagrams (Part 1)

CCSS Standards: Addressing	• 7.EE.B.3
CCSS Standards: Building towards	• 7.EE.B.4

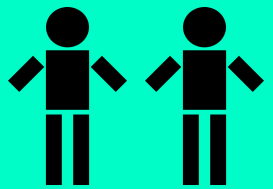
Lesson 2

Let's use tape diagrams to make sense of different kinds of stories!

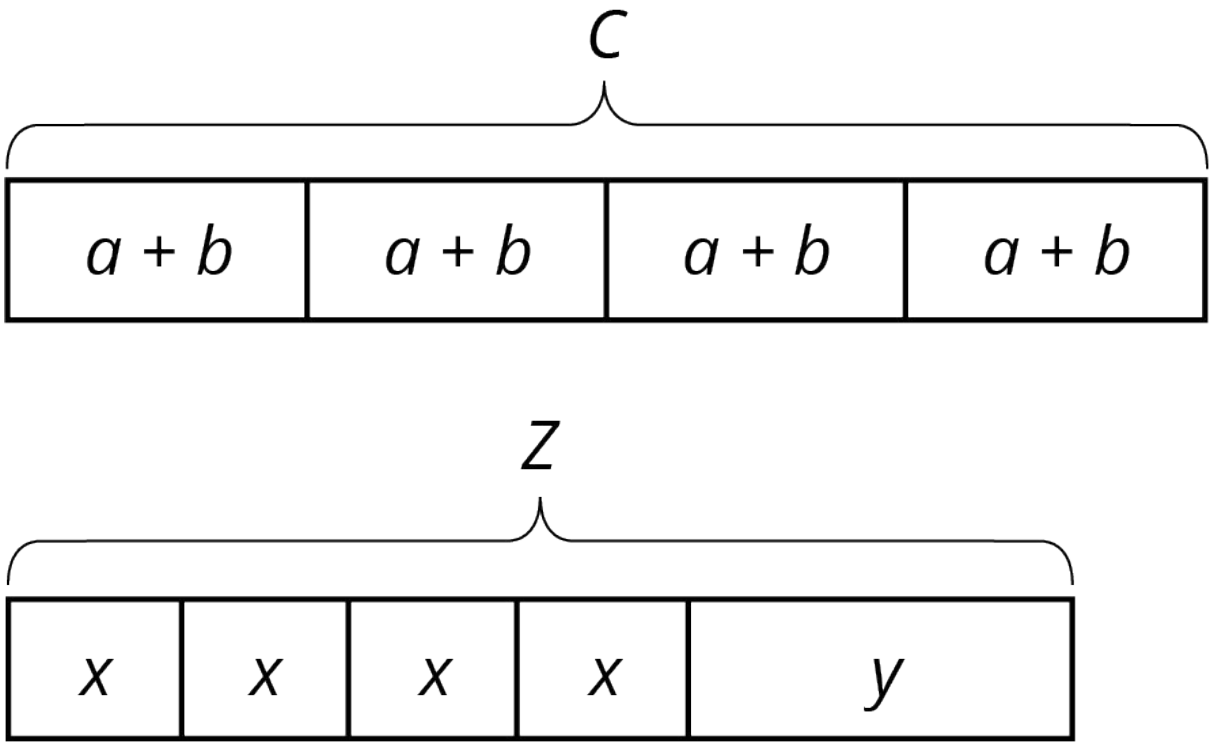


Remembering Tape Diagrams

Warm Up



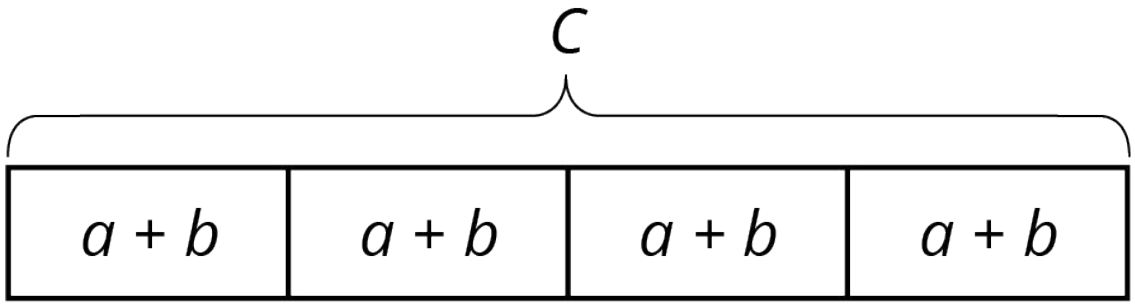
What do you notice? What do you wonder?

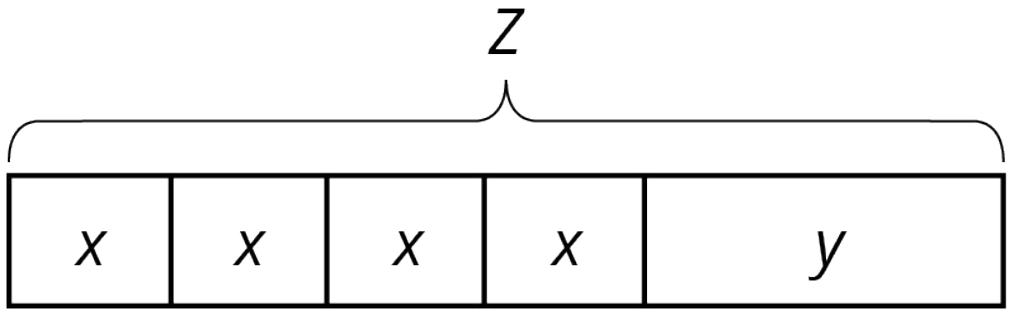


What are some possible values for a, b, and c in the first diagram?

For x, y, and z in the second diagram?

How did you decide on those values?

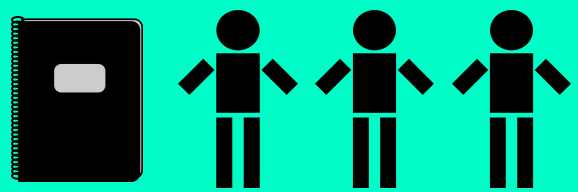




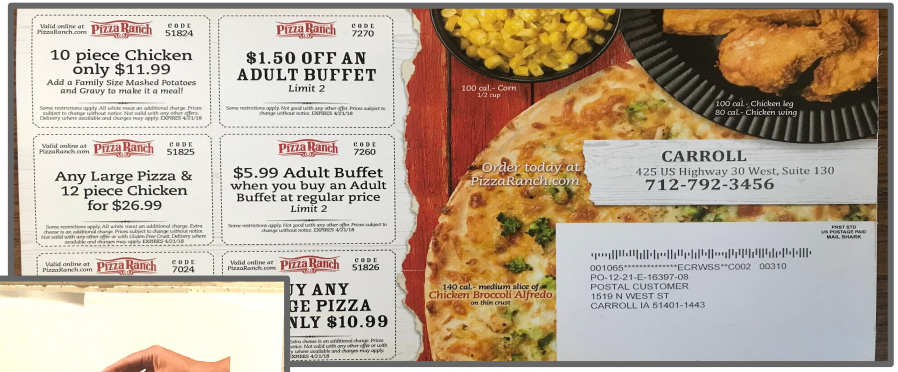
Every Picture Tells a Story

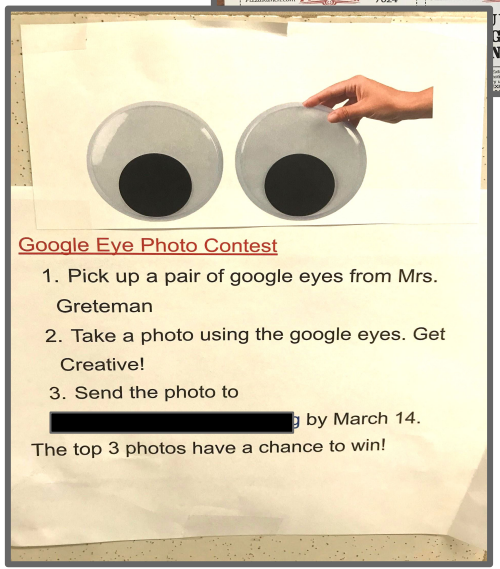
Activity 1

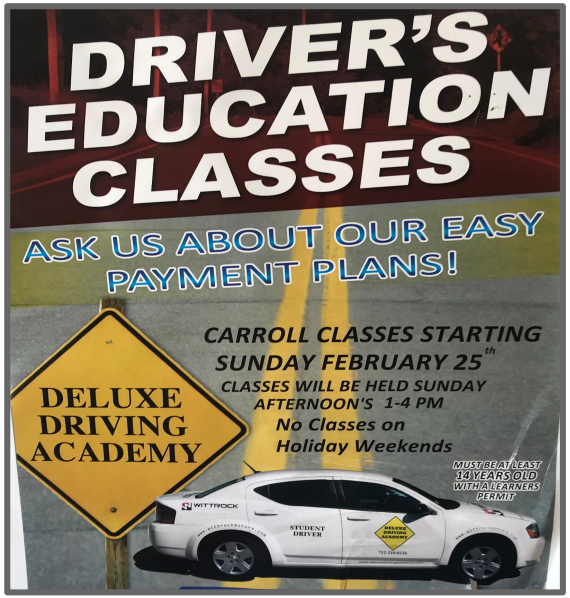
- **Three Reads**



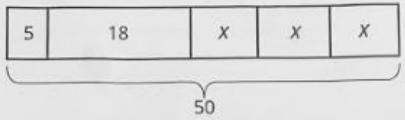
What is a flyer?



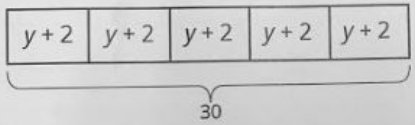




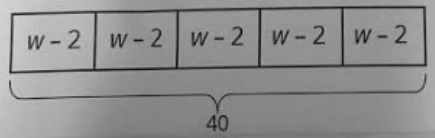
1. Mai made 50 flyers for five volunteers in her club to hang up around school. She gave 5 flyers to the first volunteer, 18 flyers to the second volunteers, and divided the remaining flyers equally among the three remaining volunteers



2. To thank her five volunteers, Mai gave each of them the same number of stickers. Then she gave them each two more stickers. Altogether, she gave them a total of 30 stickers.



3. Mai distributed another group of flyers equally among the five volunteers. Then she remembered that she needed some flyers to give to teachers, so she took 2 flyers from each volunteer. Then, the volunteers had a total of 40 flyers to hang up.



In this activity are 3 stories and a diagram to match each.

1. With your group, decide who will go first. This person will explain why the diagram represents the story.
2. Work together to find the unknown variable.
3. Switch roles for the next problem.

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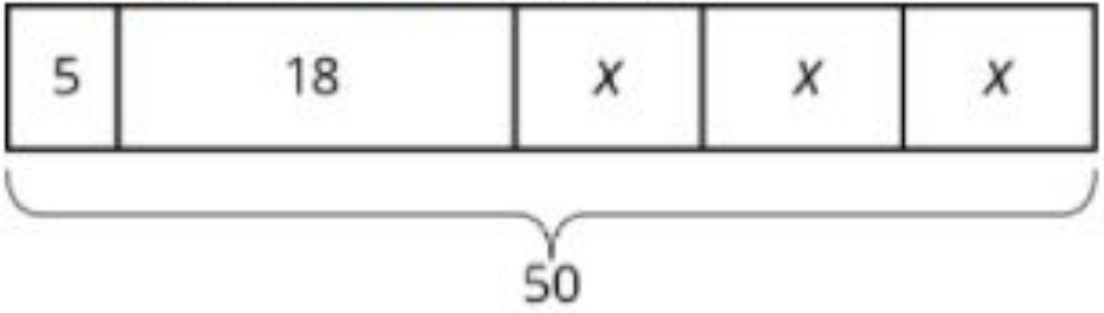

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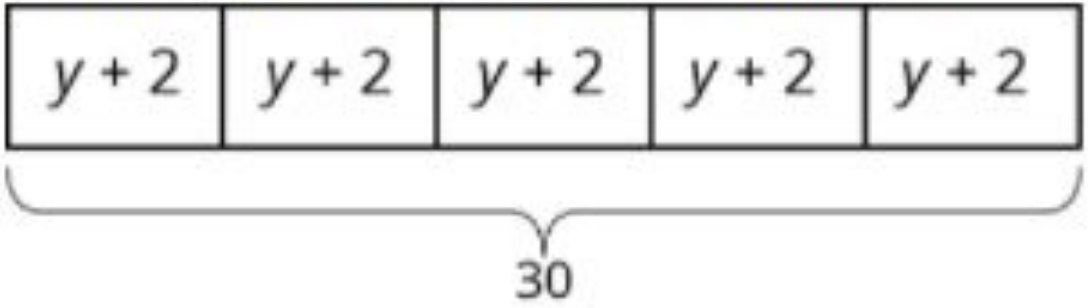

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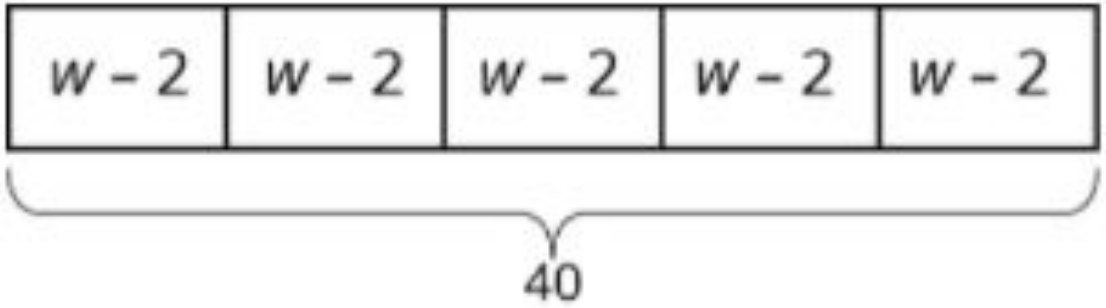
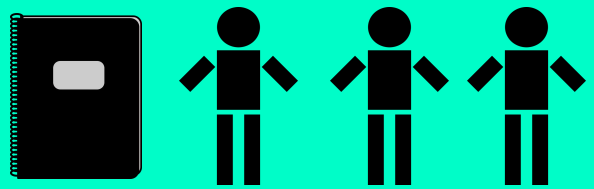
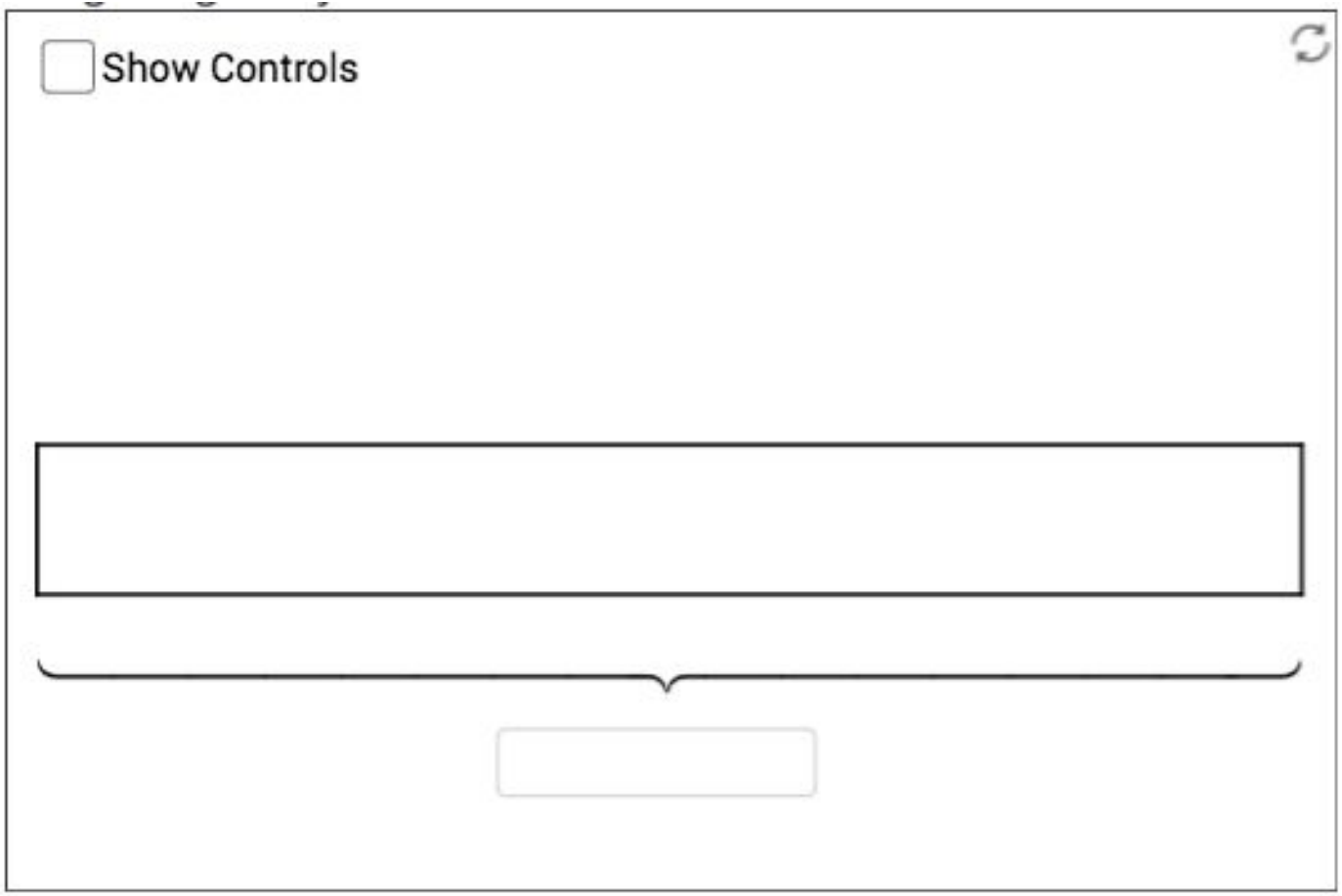


Every Story Needs a Picture

Activity 2

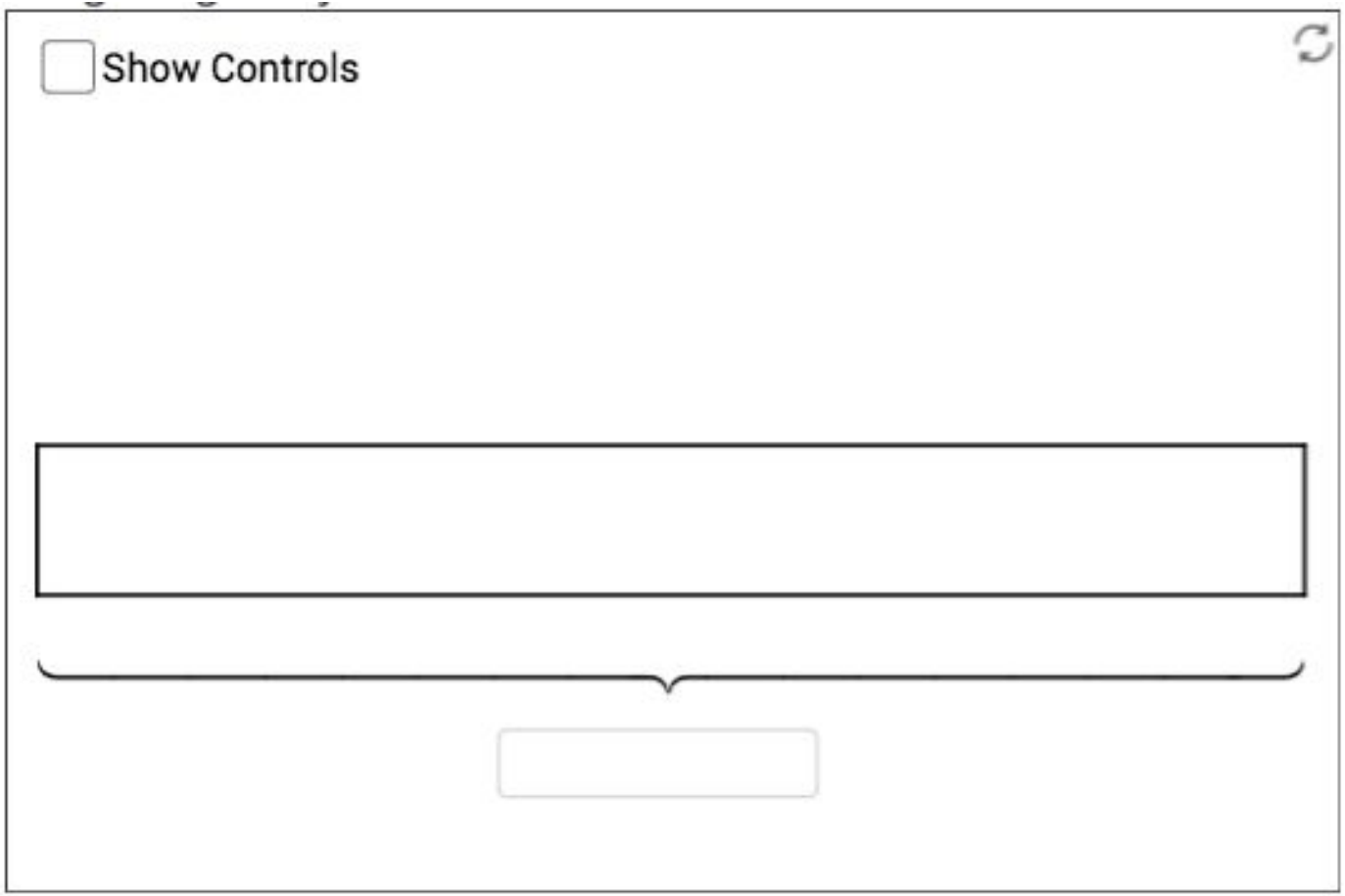



Show Controls

For this activity, you will be making a tape diagram for each story. Then describe how you would find unknown amounts in the stories.

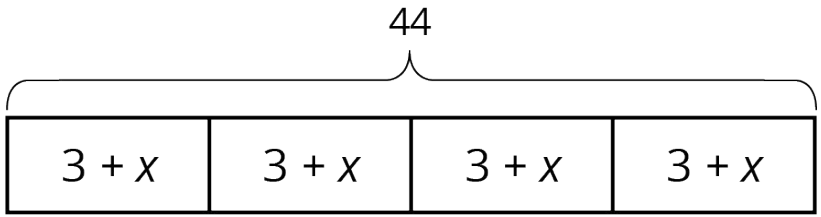
If you decide to use the digital tool, please record everything on your paper, as well.

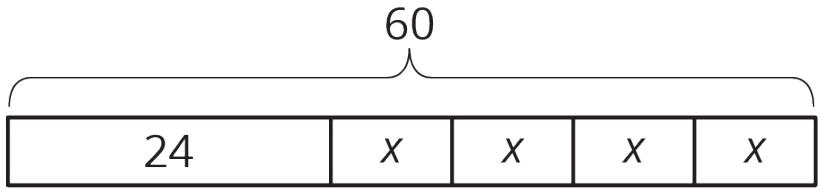
>Unit 6
>Lesson 2
>Activity 2.3

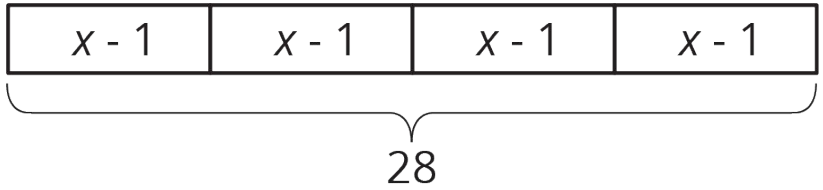

Show Controls

Were there any disagreements in your groups?

How did you resolve them?

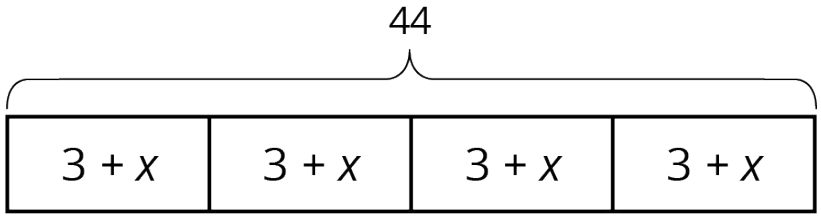


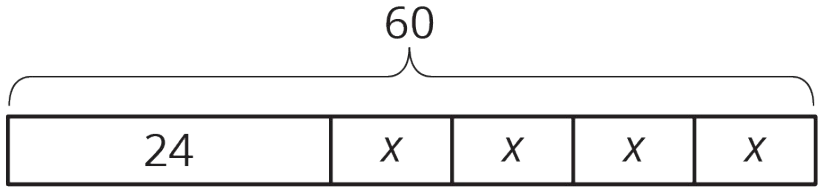


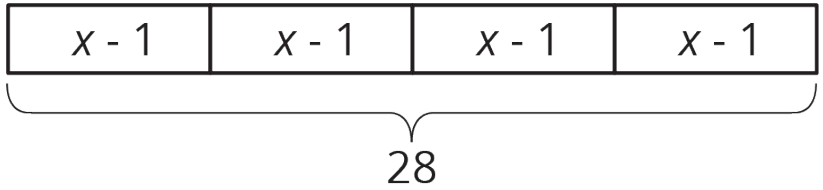


How are the diagrams alike?

How are they different?







“Are you ready for more?”

Design a tiling that uses a repeating pattern consisting of 2 kinds of shapes (like 1 hexagon with 3 triangles).

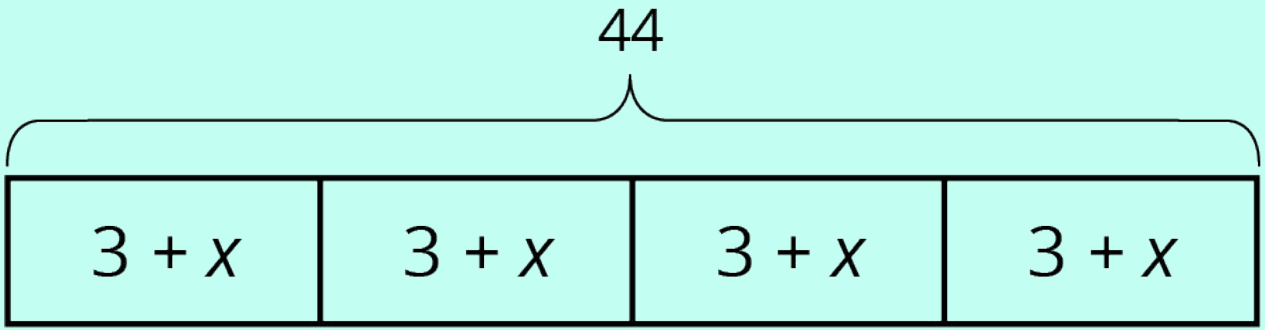
How many times did you repeat the pattern in your picture?

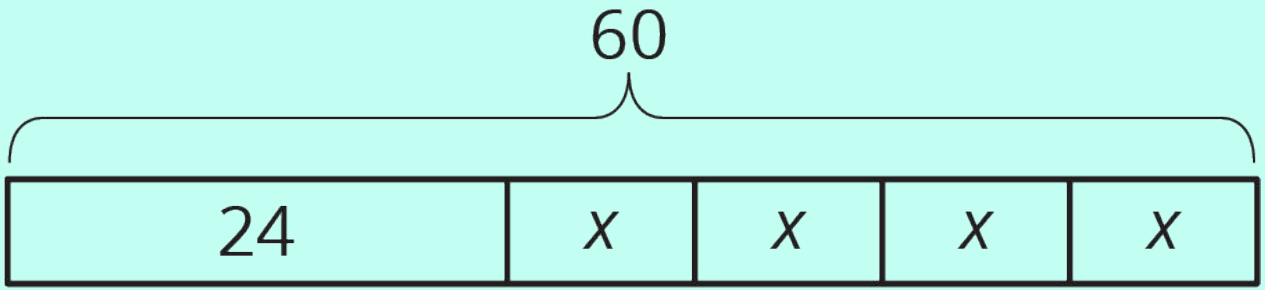
How many individual shapes did you use?

Today's Goals

- ❏ I can explain how a tape diagram represents parts of a situation and relationships between them.
- ❏ I can use a tape diagram to find an unknown amount in a situation.

What are some ways that tape diagrams give information about a story?





Red and Yellow Apples