February & March Calendar Grid

The Fraction Number Line

Overview

The teacher works with input from students to record one fraction each school day that corresponds with that day's calendar marker. Each fraction is placed on a number line to build student understanding of fractions as a number.

Frequency

Update every day and discuss once or twice a week.

Skills & Concepts

- Modeling, reading, and writing common fractions
- Identifying area models of common fractions
- Recognizing equivalent fractions
- Understand fractions as equal parts of a whole or equal partitions of a set
- Represents fractions on a number line
- Diagrams fractions using a number line model

You'll need

- April & May Calendar Grid Markers
- 1/2 sized April and May calendar markers, laminated, so they can be written on with a dry erase marker. (Or square post it notes, if you choose)
- An area to place the number line. Border of a white board, chalkboard tray, or just general wall space. Approximately 6 inches X 6 feet.
- Tape, if you choose to use the ready made 1/2 sized markers
- Chart Paper
- Adding machine tape or sentence strips (if you choose)

Instructions for Fraction Number Line

1. Pull and use the April and May calendar markers for February and March calendar grid. This change has been made to enhance student understanding of unit 6 on fractions that will be taught in February and March during your daily math sessions. (You will use the February and March calendar markers in April and May).

2. Cut apart the 1/2 sized calendar markers and laminate them for future use. Teachers may also choose to use post it notes to create this number line but many students will still need the scaffolding of having the picture tied to the fractional number.

3. On the first day of February label the 1/2 sized calendar piece with 1 or 1 whole (Use a dry erase marker or vis-a-vie pen because you will want to clean the pieces for use in the future) and tape it to a piece of chart paper or a spare area on the whiteboard. On day two repeat the process, write 1/2 on the marker and place it in the holding area. Complete this process for the first 7 to 10 days of the month.

4. Once you have a nice collection of labeled fractions it is time for your first discussion. You will build the number line with student assistance. You will find numbers to assist you in setting up the number line with the 1/2 sized markers. Place the 0 at the very beginning of the area you have designated as the number line area. This will be the beginning of your number line. You will then place the number 1 on the line about 3 feet down the line. The numbers 2,3,4 and 5 will be used to extend the number line in March, you may place them on the line now if you would like or add them as the students see the need. This number line is fluid and students may have to move items to make room for more markers as you go. This experience will help them solidify CCSS 3.NF.2. Discuss where each marker should be placed on the number line and why. This is also a great time to talk about how different wholes may be different sizes but on a number line 1/3 is 1/3, no matter what the model looks like because it is 1/3 on the line between 0 and 1. In real life most of us would like 1/3 of a giant candy bar instead of 1/3 of a mini candy bar but on the number line 1/3 is representing any size item. It is representing splitting the number line, or the whole, into 3 equal parts between 0 and 1 and placing the fractional part on the line. This is a very difficult concept for most students and will need repeating throughout the two-month number line activity.

5. Continue adding to the number line and discussing daily, some teachers like to keep the markers in the holding area then place and discuss the fractions all on one or two days a week. This gives the students more time to think about where they are placing the fractions in comparison to other fractions.

6. Students will also encounter equivalent fractions. Simply tape these fractions in a vertical line so they hang down below one another. This is where many conversations might start about equivalent fractions all being the same fraction but not looking the same because the fraction represents a part of a whole and the size is determined by how big the whole is. Some students will need you to explain that fractions are just like any other number. Five elephants look very different than five mice but they are both still five. 1/2 of a group of six elephants looks very different than 1/2 of a group of six mice but both are still 1/2 of a whole.

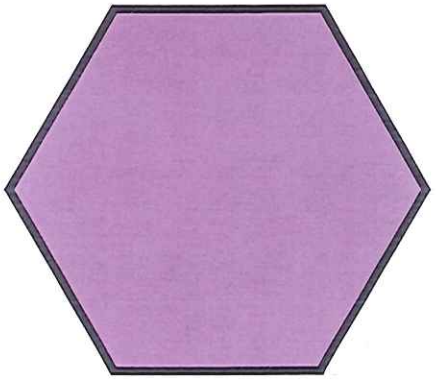
7. In the month of February students will be working with fractions between 0 and 1. In March you will use the May calendar grid and May 1/2 sized pieces to extend the number line to 5. Students will be exposed to mixed numbers for the first time. They will also be looking at money and decimals as fractions for the first time too.

8. To analyze the money calendar pieces students will need an understanding of quarters and dollars so a quick review may have to take place for some students.

9. When placing the money pieces on the number line many teachers like to write the decimal number and the fraction on the piece so students begin to make the connection between decimals and fractions.

10. Continue adding to and building the fraction number line all during the month of March. Once the number line is complete some teachers remove the line to reuse the space for other things but many teachers either move or leave the line for student reference for the remainder of the year. If you think you may want to keep your number line and move it you may want to build it on top of adding machine tape or sentence strips so it can easily be transported to another place in the classroom.

11. For clean up simply wipe off the fractions with dry erase board spray or a moist paper towel and store the number line pieces for use the next year.



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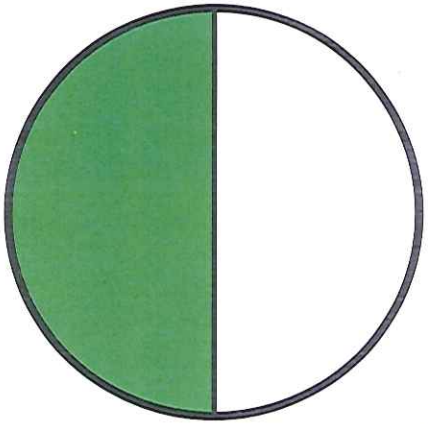

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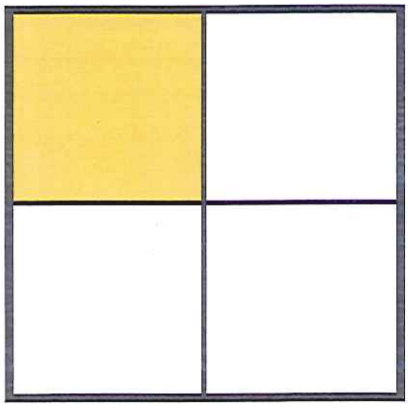

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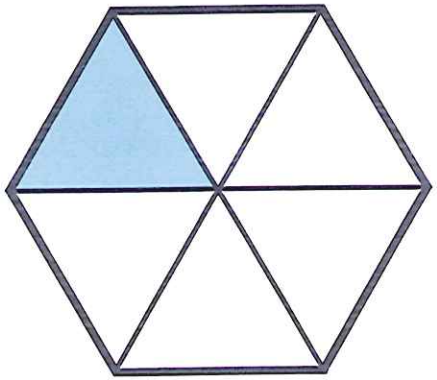

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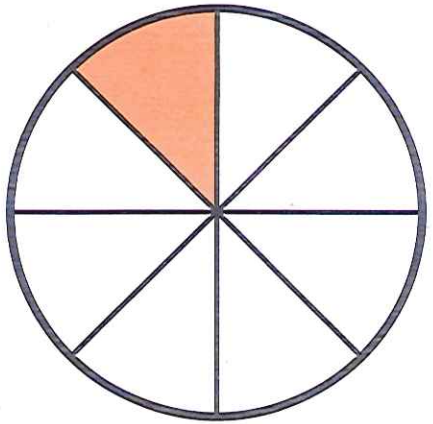

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April (February) Markers

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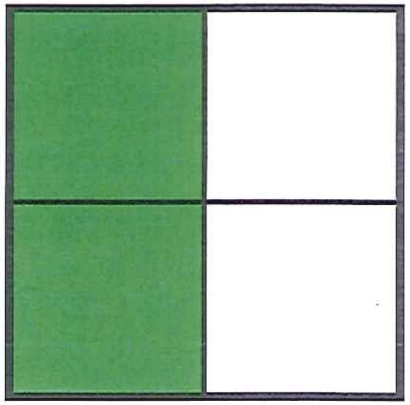

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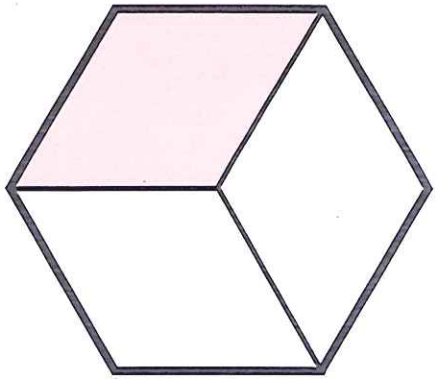

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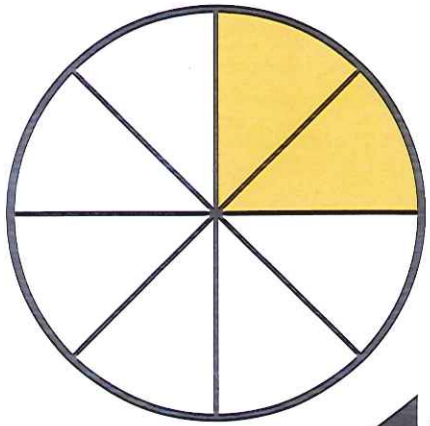

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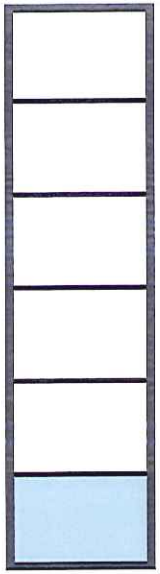

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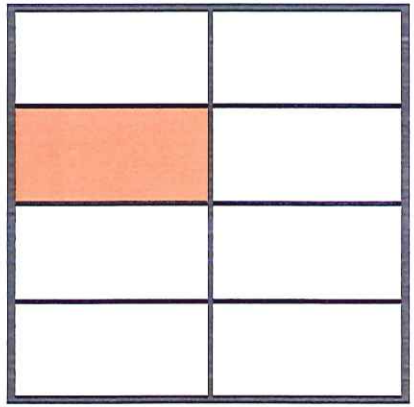

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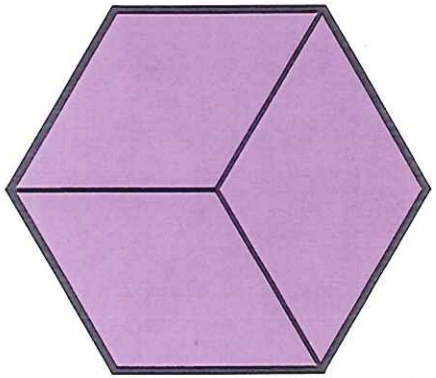

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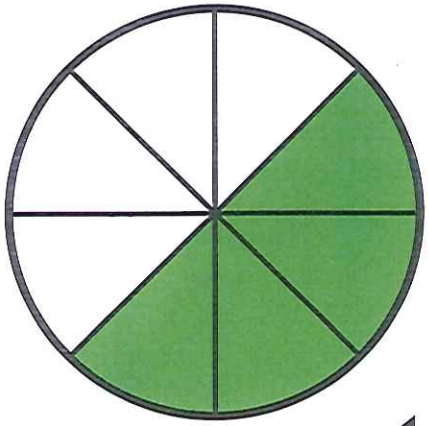

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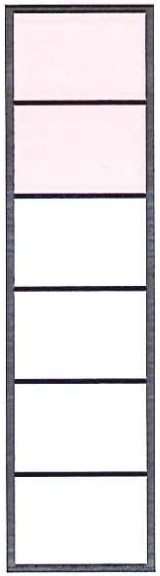

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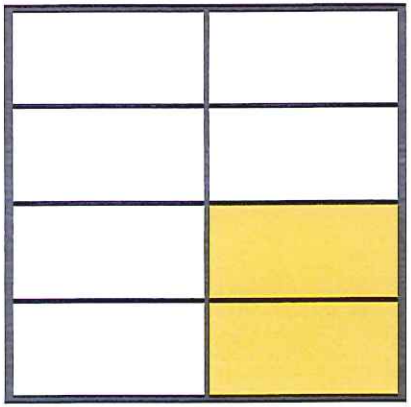

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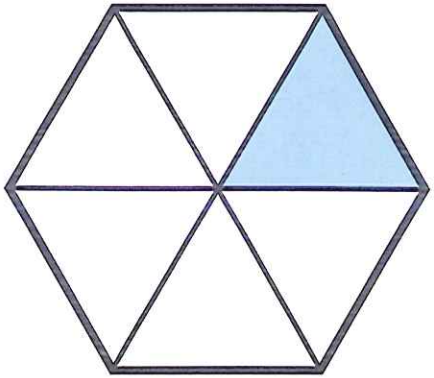

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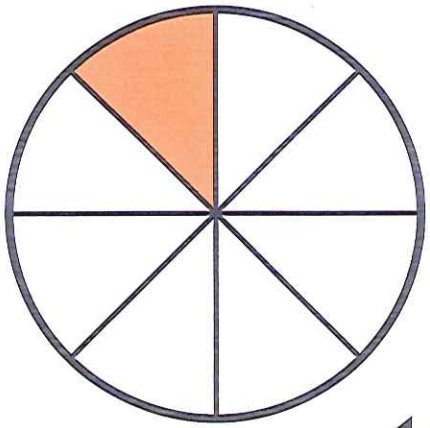

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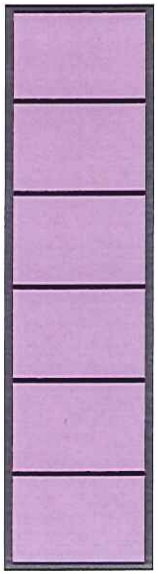

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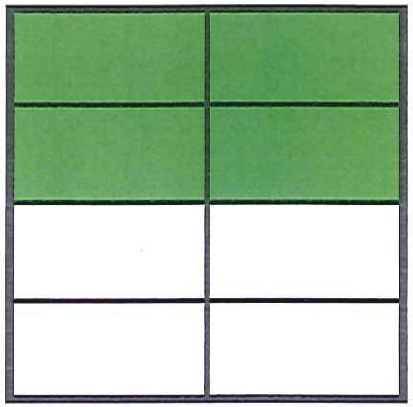

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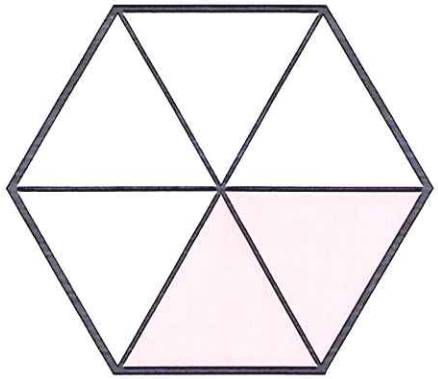

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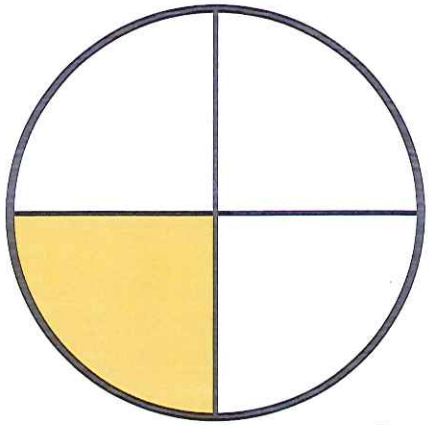

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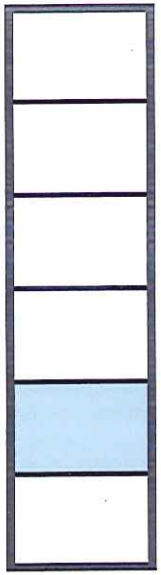

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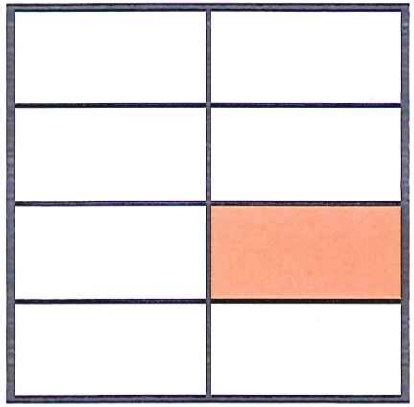

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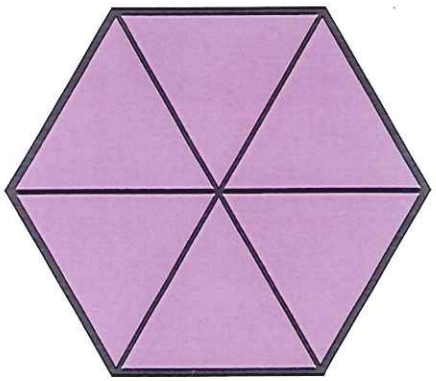

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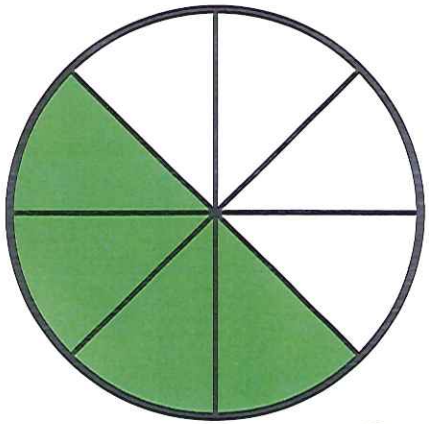

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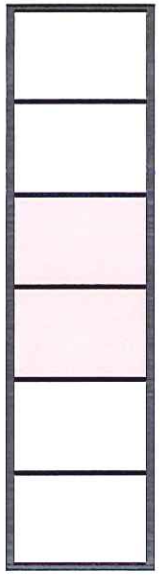

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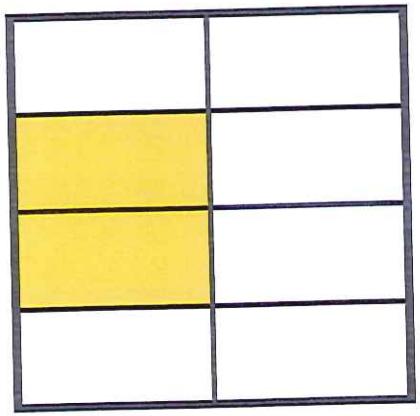

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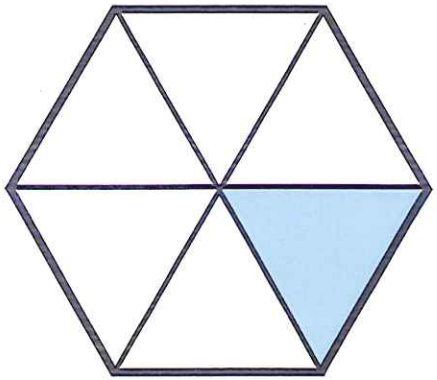

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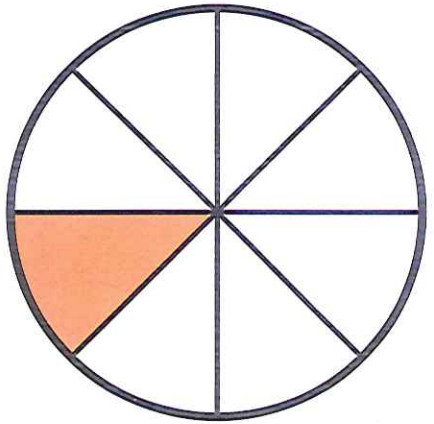

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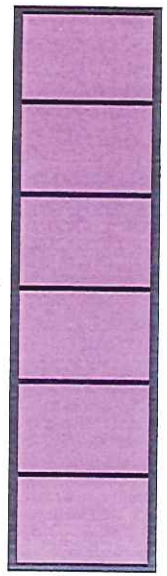
1	2	 31
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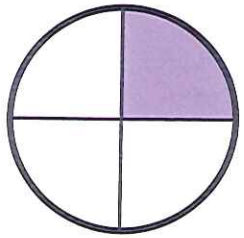

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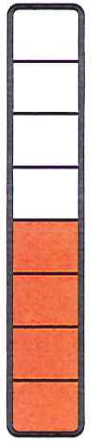

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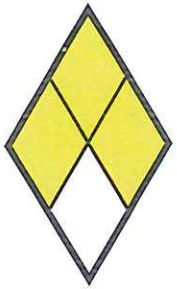

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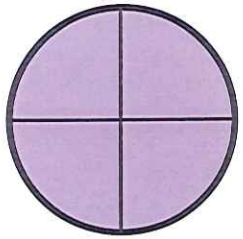
May (March) Markers



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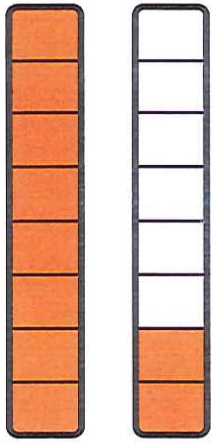

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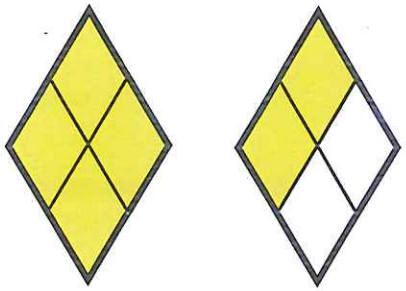

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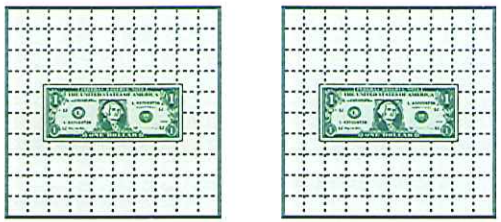

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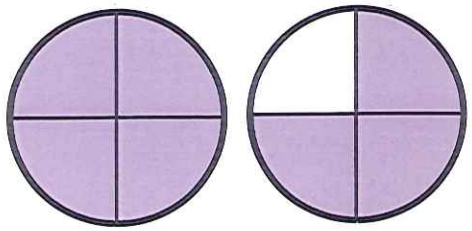

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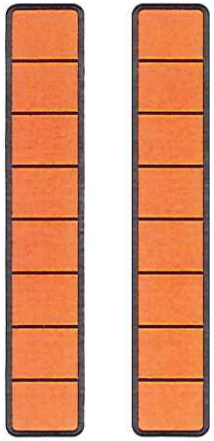

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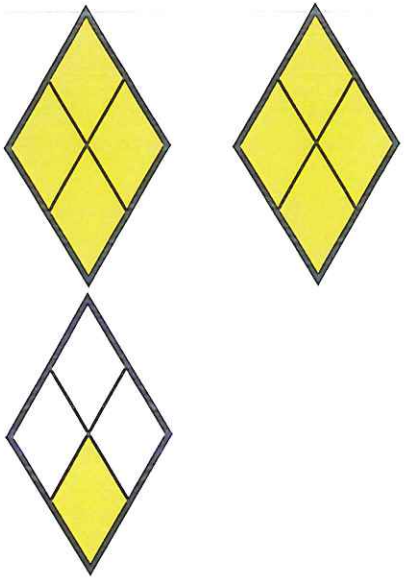

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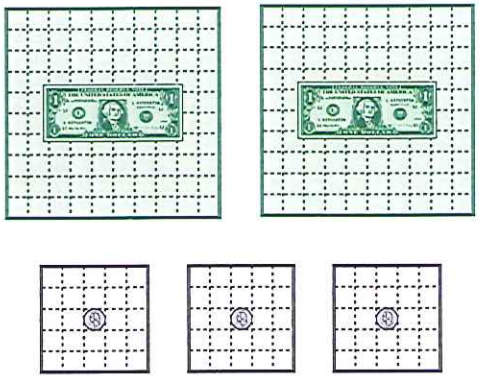

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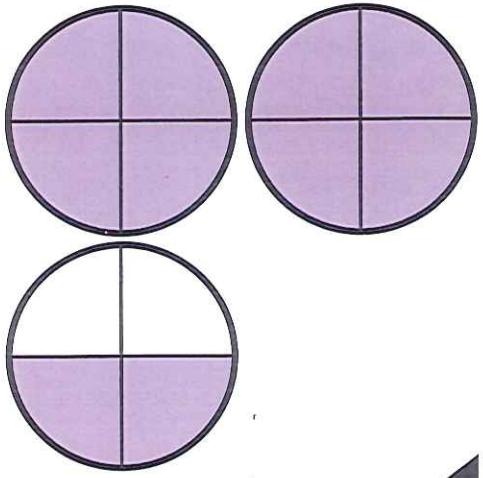

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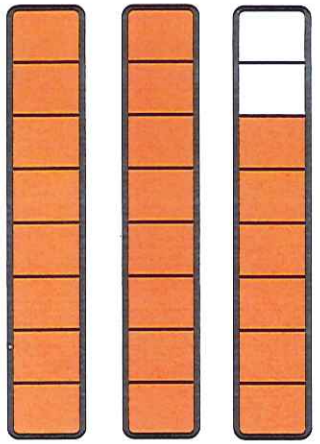

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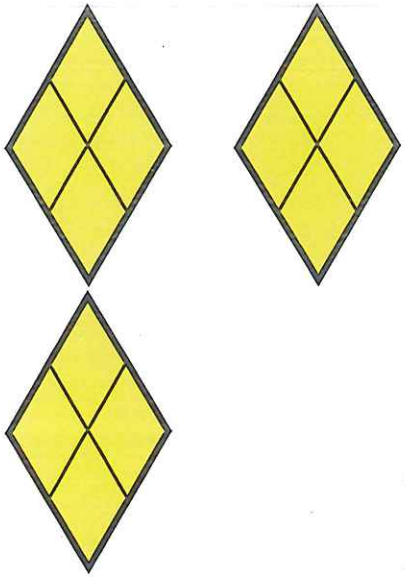

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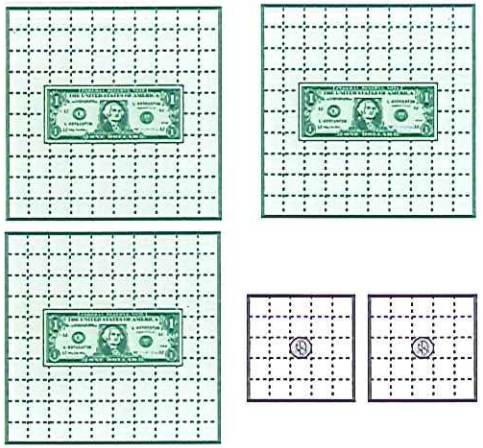

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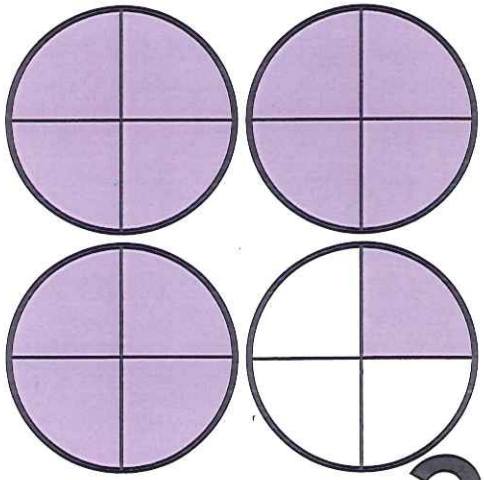

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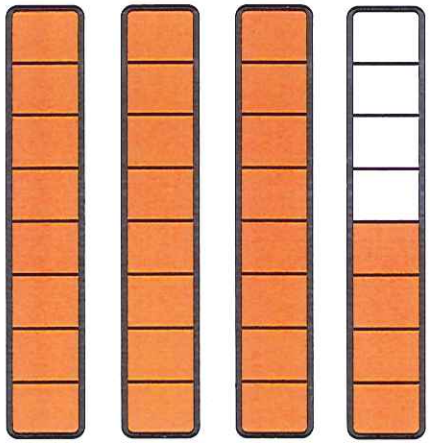

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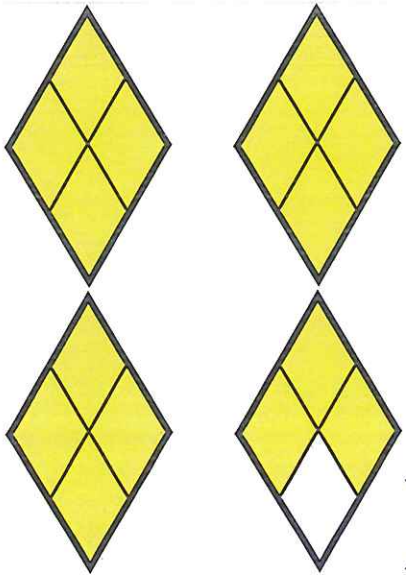

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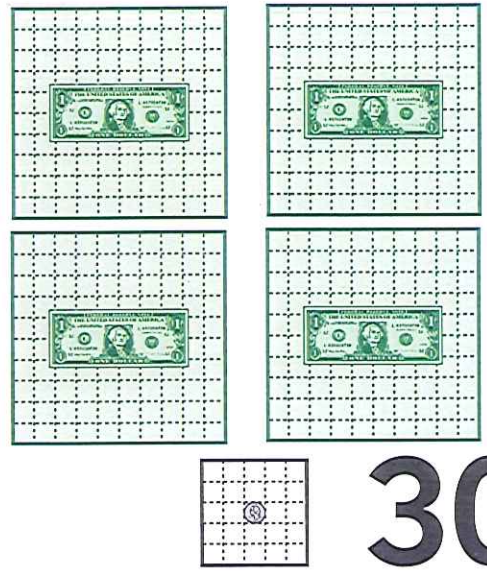

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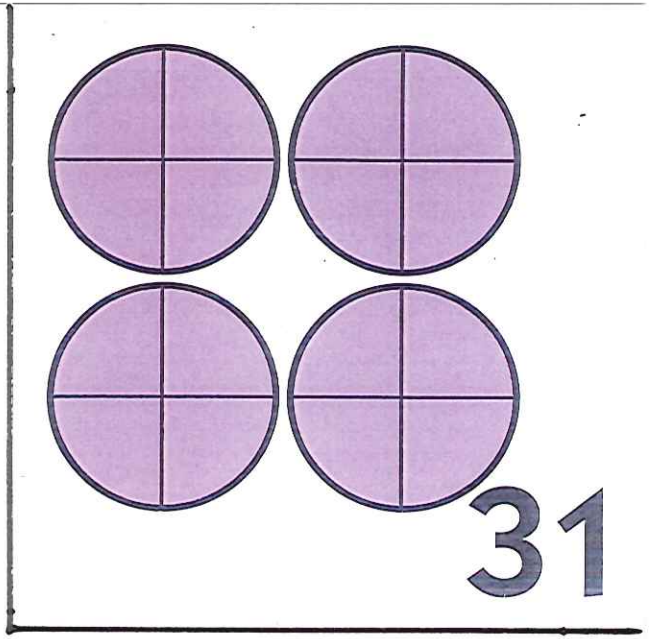

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