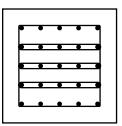
Here is a box. Cut this box in half in as many ways as you can.

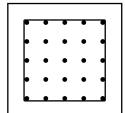
- Put one rubber band around all the outer pins to show a large square.
- Use other rubber bands to show equal parts.
- Record your solutions.
- Fill in the blanks.

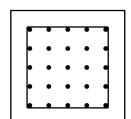


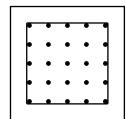
4 equal parts.

Each part is $\frac{1}{4}$.

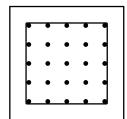
1. Show 2 equal parts. Find three different ways. Each part is _____.

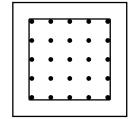


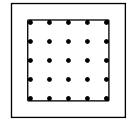




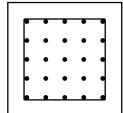
2. Show 4 equal parts. Find three different ways. Each part is _____.

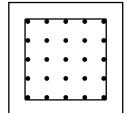


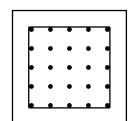




3. Show 8 equal parts. Find three different ways. Each part is _____.







Challenge

Show 32 equal parts on a geoboard. Each part is _____.

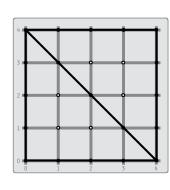
Use a geoboard and rubber bands to build the model. Write the number of equal-sized parts.

1.





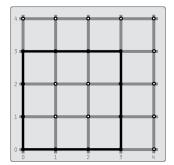
3.



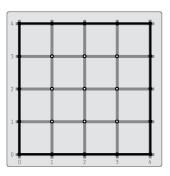
_____ equal-sized parts _____ equal-sized parts _____ equal-sized parts

Use a geoboard and rubber bands to build the square and divide it into equal-sized parts. Draw the model. Shade one part. Write the unit fraction for the part you shaded.

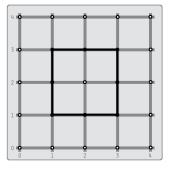
Make 3 parts.



5. Make 8 parts.



6. Make 2 parts.



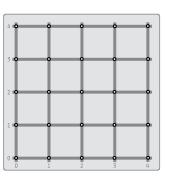
Each part is _____.

Each part is _____.

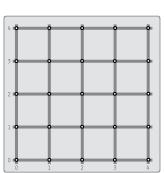
Each part is _____.

Draw a square on the geoboard picture. Divide the square into equal-sized parts and write the unit fraction for each part.

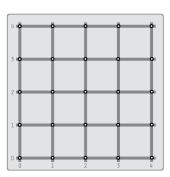
7. parts



8. parts



9. _____ parts

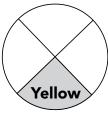


A game of professional basketball has four parts known as quarters.

How many parts are in a regulation game of

- a. baseball?
- **b.** football?
- c. hockey?
- **d.** soccer?

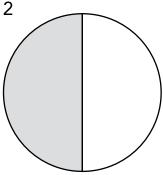
- Model the fraction with Fraction Circle pieces on the circle.
- Trace around the Fraction Circle pieces to draw the model of the fraction.
- Color the fraction parts below with the same color as the Fraction Circle pieces.



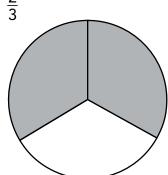


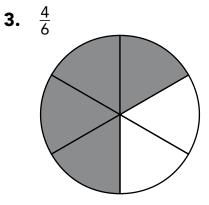
2.

Use Fraction Circles to build the model. Tell how many fraction pieces you used.



2. $\frac{2}{3}$





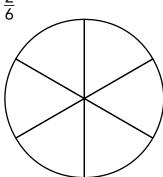
I used _____ piece.

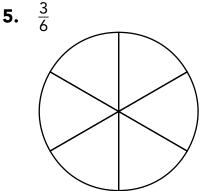
I used _____ pieces.

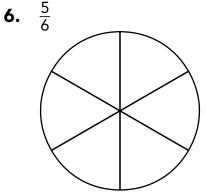
I used _____ pieces.

Use Fraction Circles to build a model of the fraction. Sketch your model by coloring parts of the circle.

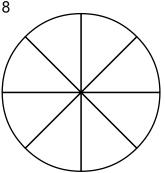
4. $\frac{2}{6}$

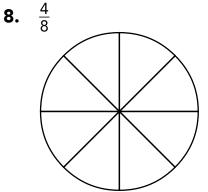




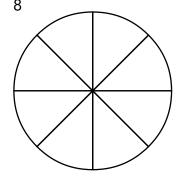


7. $\frac{2}{8}$





9. $\frac{6}{8}$



Cut these pizzas as shown.



a. 2 exact pieces

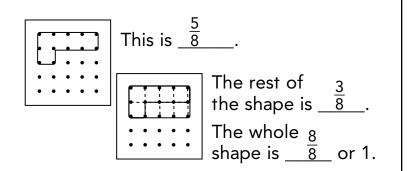


b. 3 exact pieces

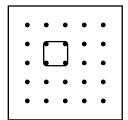


c. 4 exact pieces

- Part of a shape is shown. Use a rubber band to model it.
- Use another rubber band to show the whole.
- Record the whole shape.
- Fill in the blanks.



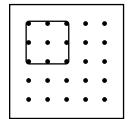
1. This is $\frac{1}{4}$.



The rest of the shape is _____.

The whole shape is ____ or 1.

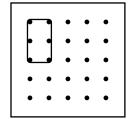
2. This is $\frac{1}{3}$.



The rest of the shape is

The whole shape is ____ or 1.

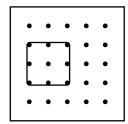
3. This is $\frac{1}{4}$.



The rest of the shape is _____.

The whole shape is ____ or 1.

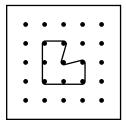
4. This is $\frac{2}{3}$.



The rest of the shape is _____.

The whole shape is ____ or 1.

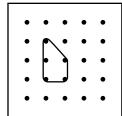
5. This is $\frac{3}{4}$.



The rest of the shape

The whole shape is ____ or 1.

6. This is $\frac{3}{8}$.



The rest of the shape is _____.

The whole shape is ____ or 1.

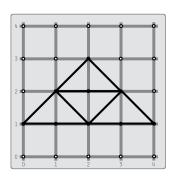
Challenge

Put a rubber band around any 4 pins on a geoboard to make a triangle.

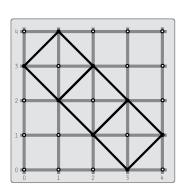
This shape shows $\frac{1}{9}$. The rest of the shape is _____.

Use a geoboard and rubber bands to build the model. Write the number of equal-sized parts the model shows.

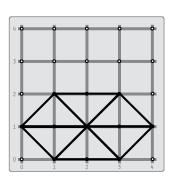
1.



2.



3.



The model shows

equal-sized parts.

The model shows

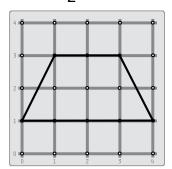
_____ equal-sized parts.

The model shows

_____ equal-sized parts.

Use a geoboard and rubber bands to model the shape and divide it into equal-sized parts. Draw the model and shade the given fraction.

4. Make 2 parts. Shade $\frac{1}{2}$.



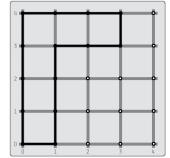
5. Make 4 parts.

Shade $\frac{3}{4}$.



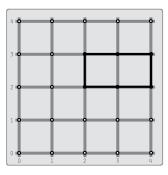
6. Make 3 parts.

Shade $\frac{2}{3}$.

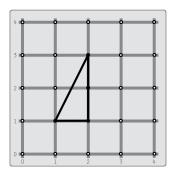


Use a geoboard and rubber bands to build the whole shape for the given part. Draw the model.

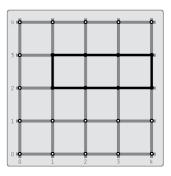
7. $\frac{1}{4}$ is given.



8. $\frac{1}{6}$ is given.



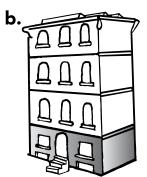
9. $\frac{3}{4}$ is given.

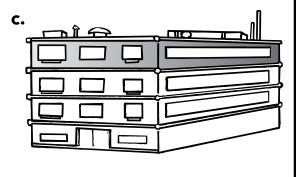


What fraction of the building is shaded?

a.

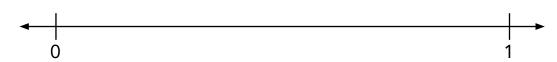






- Model each unit fraction on the number line.
- Use Fraction Towers to divide the whole into equal parts.
- Locate and label the unit fraction.

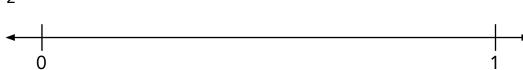
1. $\frac{1}{3}$



2. $\frac{1}{4}$



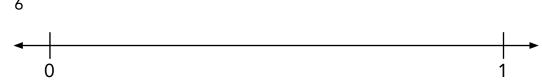
3. $\frac{1}{2}$



4. $\frac{1}{9}$

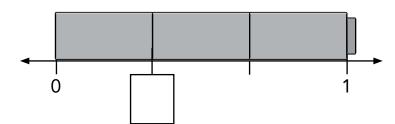


5. $\frac{1}{6}$

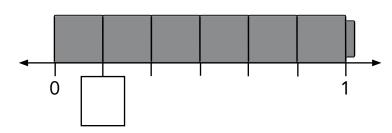


Use Fraction Tower Cubes and a blank Fraction Number Line to build the model. Write the unit fraction in the box.

1.



2.

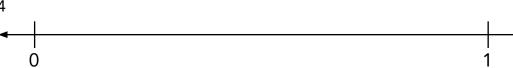


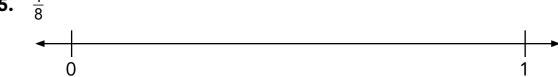
Use Fraction Tower Cubes to divide the whole into equal parts, and label each part. Locate and label the unit fraction.

3. $\frac{1}{2}$



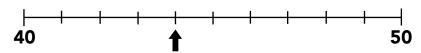
4.



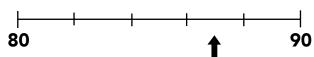




a. What number does the arrow point to?



b. What number does the arrow point to?



- Model the fraction on the number line using Fraction Tower Cubes.
- Draw your model. Mark and label the fraction.
- Fill in the answer blanks.

1. $\frac{5}{6}$



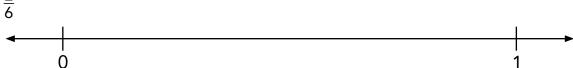
 $\frac{5}{6}$ has a length of ____ units that are each $\frac{1}{6}$ long.

2. $\frac{4}{8}$



 $\frac{4}{8}$ has a length of ____ units that are each $\frac{1}{8}$ long.

3. $\frac{2}{6}$



 $\frac{2}{6}$ has a length of _____ units that are each ____ long.

4. $\frac{3}{4}$



 $\frac{3}{4}$ has a length of _____ units that are each ____ long.

Extension

Fill in the blanks.

- 5. $\frac{3}{10}$ has a length of _____ units that are each ____ long.
- **6.** $\frac{7}{12}$ has a length of _____ units that are each ____ long.

Use Fraction Tower Cubes and the Fraction Number Line to build the model. Then fill in the blank in the sentence.

1. \frac{1}{6} \frac{1}{6} \frac{1}{6} \frac{1}{6}

 $\frac{3}{6}$ has a length of ____ units that are each $\frac{1}{6}$ long.

2. \[\frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} \frac{1}{8} \]

 $\frac{5}{8}$ has a length of ____ units that are each $\frac{1}{8}$ long.

Use Fraction Tower Cubes and the Fraction Number Line to model the number. Sketch the model. Then fill in the blanks in the sentence.

3. $\frac{3}{8}$

 $\frac{3}{8}$ has a length of ____ units that are each $\frac{1}{8}$ long.

4. $\frac{2}{4}$

 $\frac{2}{4}$ has a length of _____ units that are each ____ long.

Fill in the blanks.

- **5.** $\frac{2}{3}$ has a length of _____ units that are each $\frac{1}{3}$ long.
- **6.** $\frac{5}{6}$ has a length of _____ units that are each $\frac{1}{6}$ long.
- 7. $\frac{3}{4}$ has a length of _____ units that are each ____ long.
- **8.** $\frac{2}{6}$ has a length of _____ units that are each ____ long.

Find something in your classroom that measures about

- a. 1 inch long.
- **b.** 2 inches long.
- c. 4 inches long.
- **d.** 10 inches long.
- e. 100 inches long.

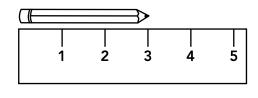
- Use the inch ruler to measure the length of each ribbon.
- Record the lengths in the second column.
- Use the quarter-inch ruler to measure the length of each ribbon.
- Record the lengths in the third column.

Ribbon Color	Inch Ruler Measurement	Quarter-Inch Ruler Measurement
1. Red	in.	in.
2. Orange	in.	in.
3. Yellow	in.	in.
4. Green	in.	in.
5. Blue	in.	in.
6. Purple	in.	in.
7. Black	in.	in.
8. White	in.	in.

Which ruler gave more precise measurements? Why? _____

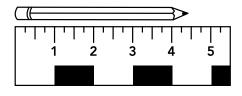
Look at the model. What is the length of the pencil to the nearest $\frac{1}{2}$ -inch?

1.



inches

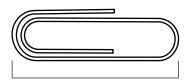
2.



____ inches

Measure to the nearest inch, $\frac{1}{2}$ -inch, and $\frac{1}{4}$ -inch.

3.

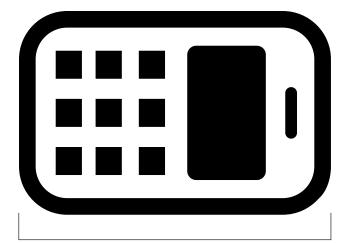


____ inches

_____ inches

_____ inches

4.

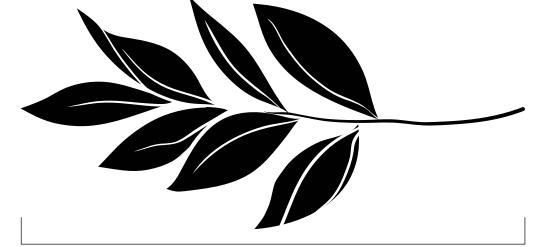


inches

____ inches

_____ inches

5.



__ inches

inches

_____ inches