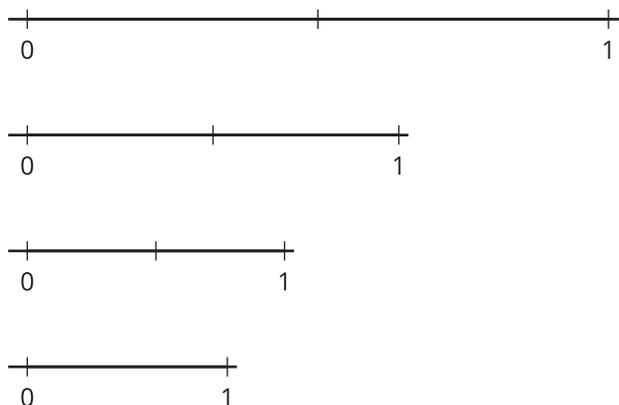


Lesson 18: Design With Fractions

- Let's use fractions to create a design.

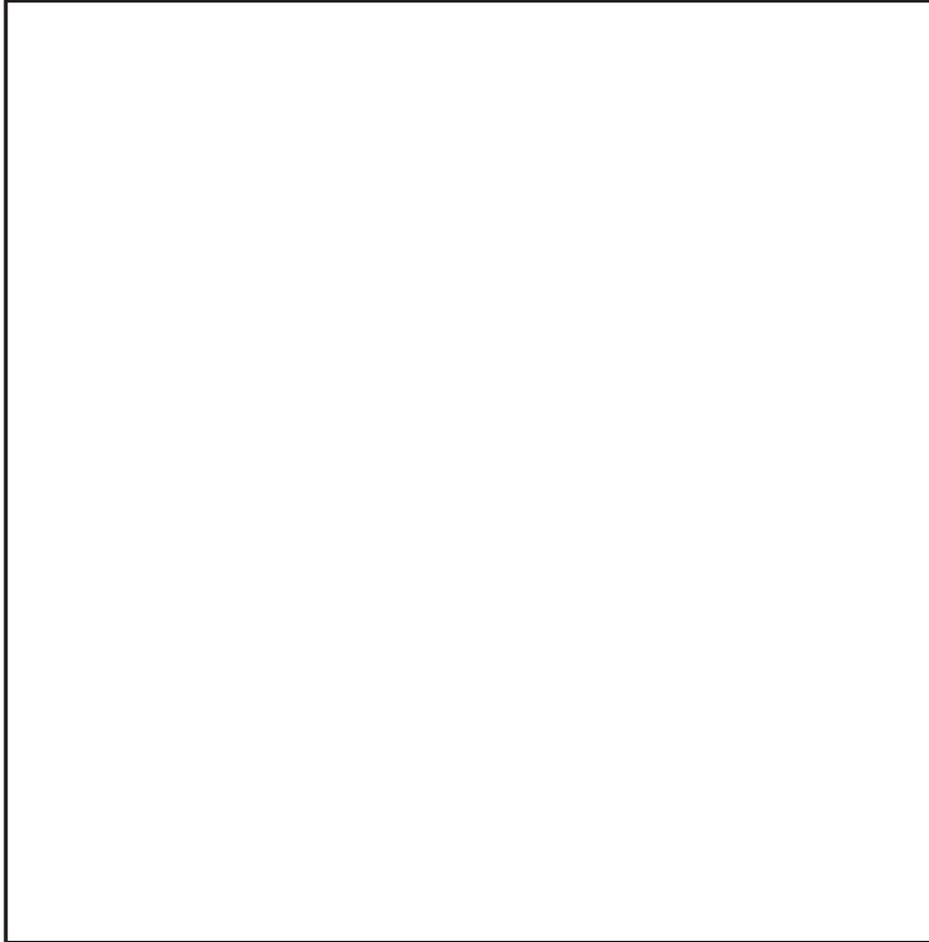
Warm-up: Notice and Wonder: Between 0 and 1

What do you notice? What do you wonder?



18.1: Design With $\frac{1}{2}$

1. Here is a square. On each side, mark a point to show $\frac{1}{2}$ of its length.

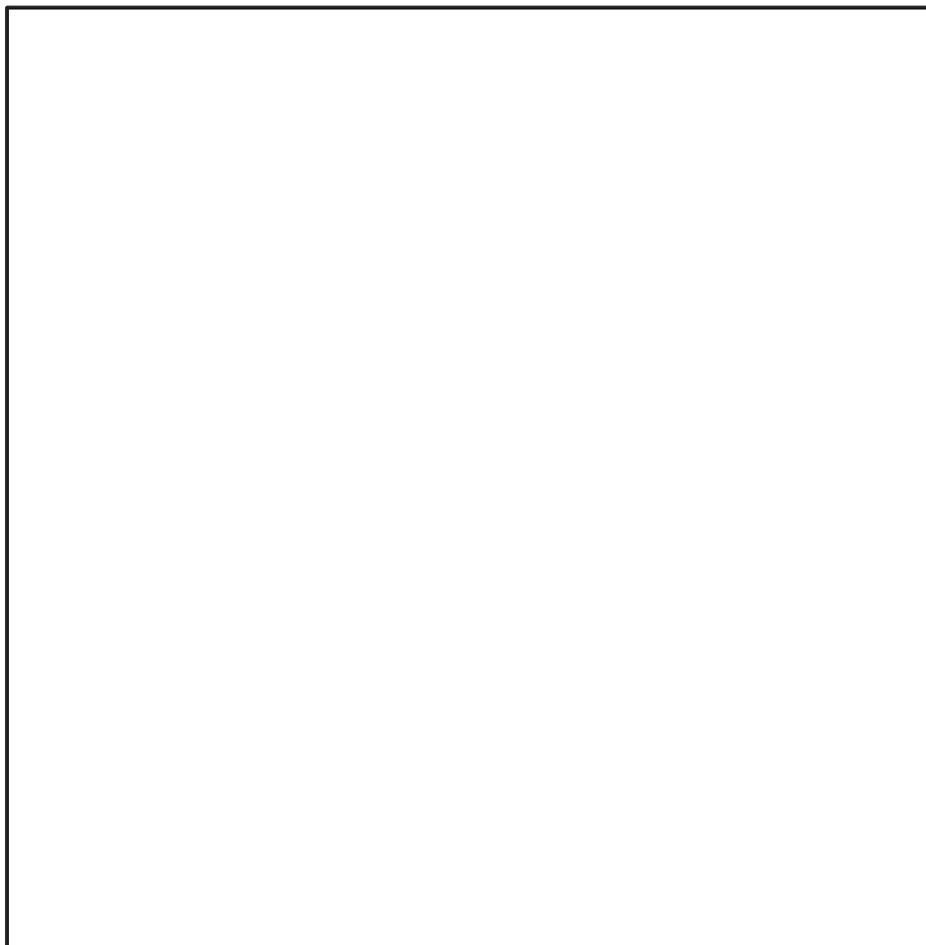


Connect each point to the point on the two sides next to it. What shape did you create?

2. Look at the new shape you created. On each side, mark a point to show $\frac{1}{2}$ of its length. Connect the points again. What shape did you create?
3. Repeat the steps you just did at least two more times. Make some observations about the design you just created.

18.2: Design With $\frac{1}{4}$

1. Here is another square. On each side, mark a point to show $\frac{1}{4}$ of its length.



Connect each point to the point on the two sides next to it. What shape did you create?

2. Look at the new shape you created. On each side, mark a point to show $\frac{1}{4}$ of its length. Connect the points again. What shape did you create?
3. Repeat the steps you just did at least two more times. Make some observations about the design you just created.