Lesson 5: To the Number Line
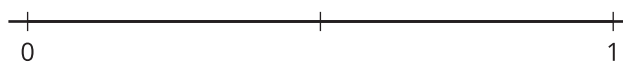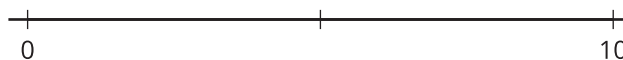
- Let's learn about fractions on the number line.
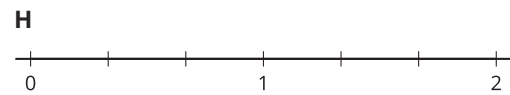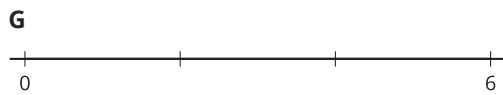
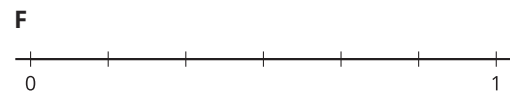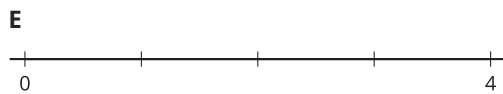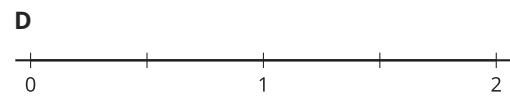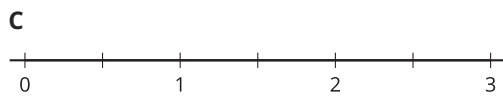## Warm-up: Notice and Wonder: Two Number Lines

What do you notice? What do you wonder?

5.1: Card Sort: Number Lines

Your teacher will give you a set of cards that show number lines. Sort the cards into categories of your choosing. Be prepared to explain the meaning of your categories.

A

0   8

B

0   1

C

0   1   2   3

D

0   1   2

E

0   4

F

0   1

G

0   6

H

0   1   2

I

0   2   4
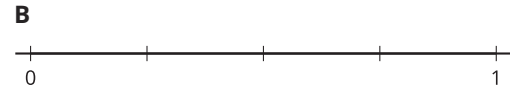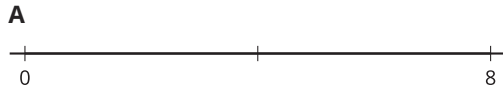
5.2: Fold and Label the Number Line

1. Andre and Clare are talking about how to label fractions on the number line. Andre says $\frac{1}{2}$ can be labeled like this:

0       $\frac{1}{2}$ $\frac{1}{2}$ 1
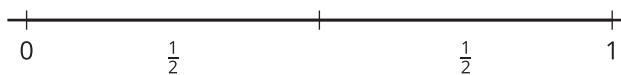
Clare says $\frac{1}{2}$ can be labeled like this:

0            $\frac{1}{2}$ 1
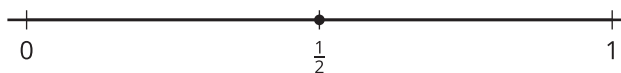
How could each student's labeling make sense?

_____

_____

_____

_____

2. Your teacher will give you a set of number lines. Cut your number lines apart so that you can fold each one.

As you fold, discuss your strategies with your partner.

    a. Fold one of the number lines into halves. Draw tick marks to show the halves. Label the number $\frac{1}{2}$.

    b. Fold one of the number lines into thirds. Draw tick marks to show the thirds. Label the number $\frac{1}{3}$.

    c. Fold one of the number lines into fourths. Draw tick marks to show the fourths. Label the number $\frac{1}{4}$.

    d. Fold one of the number lines into sixths. Draw tick marks to show the sixths. Label the number $\frac{1}{6}$.

    e. Fold one of the number lines into eighths. Draw tick marks to show the eighths. Label the number $\frac{1}{8}$.