Unit 5, Lesson 8

Fractions and Whole Numbers

Let's work with fractions and whole numbers on the number line.

Warm-up

Number Talk: Divide by 4

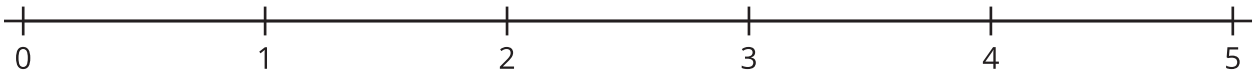
Find the value of each expression mentally.

- $12 \div 4$
- $24 \div 4$
- $60 \div 4$
- $72 \div 4$

Activity 1

Fractions Located at Whole Numbers

1. Locate and label your assigned fractions on the number line. Be prepared to explain your reasoning.



   a. $\frac{1}{2}, \frac{2}{2}, \frac{3}{2}, \frac{4}{2}, \frac{5}{2}, \frac{6}{2}, \frac{7}{2}, \frac{8}{2}, \frac{9}{2}, \frac{10}{2}$

   b. $\frac{1}{3}, \frac{2}{3}, \frac{3}{3}, \frac{4}{3}, \frac{5}{3}, \frac{6}{3}, \frac{7}{3}, \frac{8}{3}, \frac{9}{3}, \frac{10}{3}, \frac{11}{3}, \frac{12}{3}$

   c. $\frac{1}{4}, \frac{2}{4}, \frac{3}{4}, \frac{4}{4}, \frac{5}{4}, \frac{6}{4}, \frac{7}{4}, \frac{8}{4}, \frac{9}{4}, \frac{10}{4}, \frac{11}{4}, \frac{12}{4}$

2. List all the fractions that were located at a whole number on all 3 number lines that your group labeled.

3. What patterns do you see in all 3 labeled number lines?

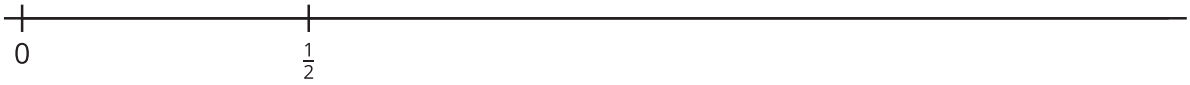


Activity 2

Locate 1 on the Number Line

1. Locate and label 1 on each number line. Be prepared to explain your reasoning.

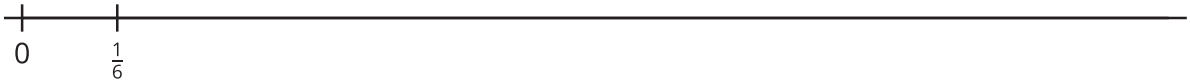
a.



b.



c.



d.



2. How could you locate 2 on the number lines in the previous problem?