



Number Rights

Learner Guide



Watch the animation, *Number Rights*, and complete these activities. The animation and an instructor guide are available on iTunes U (search "Math Snacks") and at mathsnacks.org

1. In the Number Rights animation, the speaker, $\frac{1}{4}$, says that you can also call her $\frac{2}{8}$, $\frac{4}{16}$, or $\frac{7}{28}$. Write other names for the numbers in the boxes below the number line.

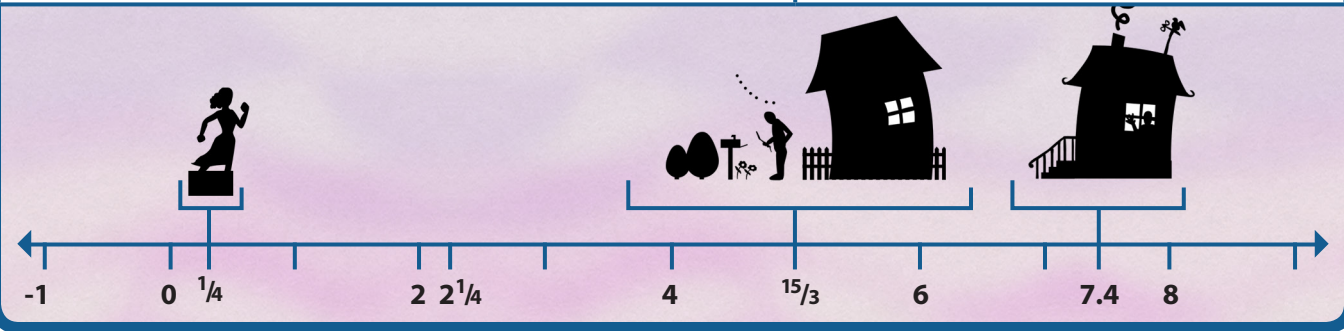
A number line from -1 to 4 with tick marks at -1, -4/6, -16/24, 0, 5/7, 1, 2, 2 1/7, 3.5, and 4. Brackets above the line group icons with their corresponding numbers: a person at a desk with a lamp and TV for -4/6; a person playing a ball game under a tree for 5/7; a person at a desk with a laptop for 2; and a person sitting on the ground reading under a tree for 2 1/7. Below the line are empty boxes for equivalent fractions and decimals: three boxes under -4/6, two boxes under 5/7, three boxes under 2 1/7, and two boxes under 3.5.

2. Shout from your desk, "A fraction or a decimal is just like any other number and deserves to be put on the number line!" Think of five fractions and five decimals and place them at the appropriate places on the number line below.

A blank number line from -2 to 3 with tick marks at -2, -1, 0, 1, 2, and 3.

3. Look at the number line and answer these questions.

	Answers
A. $\frac{15}{3}$ is how many units to the right of 3?	
B. What number is the same distance from 0 on the right-hand side of the number line as -1 is on the left-hand side?	
C. What number is $2\frac{1}{2}$ units to the right of $\frac{1}{4}$?	
D. Is the number 5 closer to the number $2\frac{1}{4}$ or to 7.4?	



4. Why does the speaker in the *Number Rights* animation call zero “the hero of the number line”? In other words, why is zero so important on the number line?

5A. What is the highest point on the iceberg?

5B. At what depth is the iceberg the widest?

5C. What is the lowest point of the iceberg?

