Fraction Number-Line Mysteries

For each mystery, complete the number-line drawing and fill in the blank based on the clues.

Mystery 1

Background: I am a number between 0 and 1 on a number line with 6 equal parts.
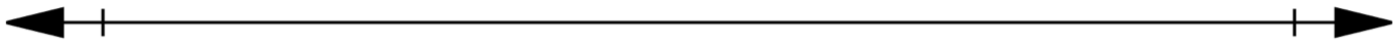
Clues:

1. I am less than $\frac{2}{3}$.
2. My numerator is an odd number greater than 1.

Question: Which number am I?

Answer: _____

Mystery 2

Background: I am a number between 0 and 1 on a number line with 8 equal parts.
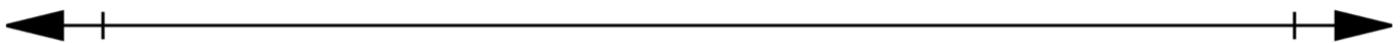
Clues:

1. I am less than $\frac{3}{4}$.
2. I am greater than $\frac{4}{8}$.

Question: Which number am I?

Answer: _____

Mystery 3

Background: I am a number between 0 and 1 on a number line with 4 equal parts.

Clues:

1. I am greater than $\frac{2}{4}$.
2. I am less than $\frac{4}{4}$.

Question: Which number am I?

Answer: _____

Talk with your partner about the patterns in all three Mysteries:

1. What information helps you draw tick marks to partition the number line?
2. What information tells you which numbers cannot be the mystery number?
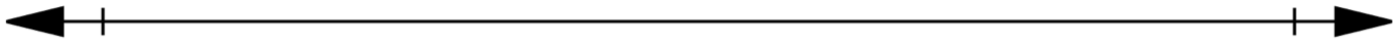
Brainstorming a Number-Line Mystery

Write your own Fraction Number-Line Mystery.

① First pick a mystery fraction between 0 and 1. Use thirds, fourths, sixths, or eighths. _____

② Write your clues. Fill in the blanks and complete the number-line drawing.

My Mystery

Background: I am a number between 0 and 1 on a number line with _____ equal parts.

Clues:

1. _____.

2. _____.

Question: Which number am I?

Answer: _____