Ring Toss Fractions

Madelyn is in the backyard playing with her ring toss toy! Go, Madelyn, go!

There are 3 purple rings and 1 white ring on this peg, and there are 6 blue rings and 2 white rings on this peg. Madelyn wants to create partitioned shapes to represent the fraction of rings on each peg.

These squares are the same shape and size. Let's partition the first square into 4 equal parts to represent the 4 total rings on the first peg, and the second square into 8 equal parts to represent the 8 total rings on the second peg.

The numerators help us know how many parts to color. Let's color 3 parts for $\frac{3}{4}$, which tells the number of purple rings, six eighths, which tells us the number of blue rings.
Excellent! Look at these shapes. They prove that $\frac{3}{4}$ and $\frac{6}{8}$ are equivalent fractions because the purple and blue take up the same amount of space in both shapes.

Madelyn is playing more ring toss! Now there are 3 orange rings and 3 white rings on this peg, and 4 yellow rings and 4 white rings on this peg. Madelyn wants to create number lines to represent the fractions for the rings on each peg. Let's get to work!

We'll start by drawing 2 number lines, one above the other. Draw an arrow at each end of each number line, and label the lines with 0 and 1. It's very important that these numbers match so that the number lines are the same size.

Let's partition the first number line into 6 equal parts and the second number line into 8 equal parts to represent the number of rings on each peg.

Place a dot at $\frac{3}{6}$ on the first number line to show the number of orange rings, and a dot at $\frac{4}{8}$ on the second number line to show the number of yellow rings.

Great job! These number lines prove that $\frac{3}{6}$ and $\frac{4}{8}$ are equivalent fractions because the dots line up.

Thanks for helping Madelyn create models to represent these equivalent fractions!