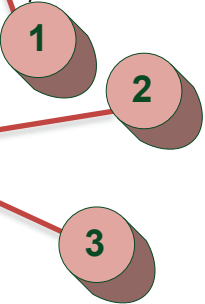


**Handout: Session 6, part 5**

**Session Plan Excerpt:**

<p>6:50-7:15 (25 min)</p> <p>Whole group individual</p>	<p><b>Representations of <math>\frac{3}{4}</math></b></p> <p>Goals: to learn more about where participants are</p> <p>To set some norms about how to talk about mathematics and listen to others' reasoning;</p> <p>To set expectations about representation, talking, reasoning, questioning, revising</p> <p>To notice key aspects of fractions across representations</p> <p>Goal is not to resolve all of the representations. May want to return to these later in the sessions or work through them in "homework"</p>	<p>Let's expand our consideration of representations of fractions. Show slide with potential representations of <math>\frac{3}{4}</math>. Slide #5-6</p> <p>Talk through the task, perhaps modeling working through one of the representations before individuals think through the rest of the representations.</p> <p>For each representation: Could this be a representation of <math>\frac{3}{4}</math>? If yes, explain how it could be a representation of <math>\frac{3}{4}</math>.</p> <p>If not, explain why it could not be a representation for <math>\frac{3}{4}</math>.</p> <p>Participants work independently: recording their thinking about each representation with respect to the numerical prompt of <math>\frac{3}{4}</math></p> <p>Ask participants to share their thinking on the connection between particular representations and <math>\frac{3}{4}</math>. During the discussion note key traits of fractions such as attending to the whole and equal partitioning. Work through a few with participants coming to the board to show and talk about their thinking.</p>	<p><i>See whiteboard plan for this section and the next. The plan will attend to what goes where on the whiteboard: topic written at the top, key ideas like "equal partitioning, attention to the whole" on the side, a working definition of fraction in the corner, space in the middle for people to record their ways of thinking about particular representations.</i></p>  <p>See whiteboard plan</p>
---	---	---	---

**Public Space Layout:**

(particular representations of  $\frac{3}{4}$  by participants) 2

\*A few teachers come to the board and write and explain their works.  
 \*Teachers can use posters and stick them in this space.


**Key points about fractions:** 3


Equal partitioning


Attention to the whole

\*Use this space for summarizing important points about fractions that are discussed.  
 \*Make sure that equal partitioning and attention to the whole are addressed

1

a) 

b) 

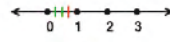
c) 


d) How many 4's are there in 3?

e) 18 crayons out of a box of 24

f) .75

g) I want to share 3 bottles of soda equally among 4 people. How much will each person get?

h) 

i) 

\*Problem stays projected on the screen for reference during the discussion