



## VIRTUAL SOLVING WORD PROBLEMS: A STORY OF RATIOS<sup>®</sup> AND A STORY OF FUNCTIONS<sup>®</sup>

### Session Objectives:

Participants will understand

- study the use of a tape diagram to aid students in algebraic fluency and modeling word problems and
- practice guiding struggling students through the modeling stages of a word problem to develop their ability to represent the problem algebraically.

TIME	AGENDA	DESCRIPTION
Zoom Session 1 2 hours	Opening Examples Stages of Modeling Expressions to Equations	<p><b>During the first virtual PD session, participants will</b></p> <ul style="list-style-type: none"> <li>• assess their current understanding of tape diagrams,</li> <li>• experience the utility of tape diagrams and examine how they can be used to model algebraic thinking, and</li> <li>• practice building tape diagrams as a scaffold to both build conceptual understanding and develop fluency with expressions and equations.</li> </ul>
Interim Work and Lunch Break 2 hours	Lulu's Problem Professional Reading Additional Tape Diagram Practice	<p><b>To prepare for the second virtual PD session, participants will</b></p> <ul style="list-style-type: none"> <li>• practice building tape diagrams to both model algebraic thinking and explore a challenging Summary Problem and</li> <li>• read and annotate "Modes of Instruction."</li> </ul>
Zoom Session 2 2 hours	Transition into Word Problems Conclusion/Q&A	<p><b>During the second virtual PD session, participants will</b></p> <ul style="list-style-type: none"> <li>• engage with the Read–Draw–Write (RDW) process and</li> <li>• practice building tape diagrams as a scaffold to both build conceptual understanding and develop fluency with word problems.</li> </ul>

### Two-Day Scheduling Option

It is recommended that schools complete parts 1 and 2 of the virtual session in one day. However, schools may choose to schedule parts 1 and 2 on two adjacent days.