



## Multiplication and Division Representations

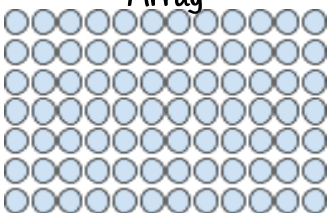
### Math, Grades 3-6

#### Assignment Objectives

- Students will work with a Paper Tutor in Live Help to represent multiplication or division.
- Students will deepen their understanding of the standard by reflecting on feedback from a Paper Tutor.
- Teachers can assign this as a Live Help session homework activity for students to deepen their understanding of math concepts.

#### Teacher Instructions

- Teachers will provide students with a multiplication or division expression.
- Students will simplify the expression in a variety of ways with the support of a Paper Tutor in Live Help.
- After students finish, they will write some of the feedback from the Paper Tutor, and reflect on their understanding.

Expression  $7 \times 12$	Model #1 Array 	Model #2 Break Apart $7 \times 12 =$ $7 \times 10 + 7 \times 2 =$ $70 + 14 = 84$
	Model #3 Repeated Addition $7+7+7+7+7+7+7+7+7+7+7+7=84$	Feedback From Tutor - How did you do? My tutor was helpful. He said I did a great job with my array and when I broke apart the multiplication fact. He helped me a lot with my repeated addition because I first was adding 12s together and it got too hard to add.



# Multiplication and Division Representation

## Student Instructions

You will work with a Paper Tutor on Live Help to represent multiplication or division expressions in different forms.

- 1. Write the expression given by your teacher in the “Expression” box.
- 2. Log on to Paper and start a Live Help session with a Math Tutor.
- 3. Start a conversation by typing in the problem, uploading a picture of the problem, or draw it out on the Whiteboard feature. You will talk with your tutor and explain why you think model make is an accurate representation, and write or draw a different model in each “Model” box.
- 4. Write helpful feedback from your Paper Tutor in the last box and rate your understanding!

**Model Examples:** Pictures, Tally Marks, Groups of items, Number Line, Skip Counting, Commutative Property, etc.

Expression	Model #1	Model #2
	Model #3	Feedback From Tutor - How did you do?  