

What is found in an Engaging Mathematics TEKS-based activity?

TEKS have been phrased in student-friendly language so that students may gauge their learning.

Common classroom materials are used for ease of preparation. Materials are listed 1-per-student unless otherwise noted. Page titles for student handouts are bolded.

Determining the Unknown in Multiplication or Division Equations, Activity 1 3(5)(D)

Activity Objective

I can determine the unknown value in a multiplication or division equation.

I can explain the connection between a division equation and a related multiplication equation.

Materials

- **Equation Match**
- **Equation Cards**
- Scissors
- Tape or glue

Answer Key

$6 = \boxed{42} \div 7$	$6 \times 7 = \boxed{42}$	$48 \div \boxed{8} = 6$	$\boxed{8} \times 6 = 48$
Number: 42		Number: 8	
$48 \div \boxed{4} = 12$	$12 \times \boxed{4} = 48$	$36 = \boxed{72} \div 2$	$36 \times 2 = \boxed{72}$
Number: 4		Number: 72	
$6 = 36 \div \boxed{6}$	$6 \times \boxed{6} = 36$	$\boxed{72} \div 6 = 12$	$6 \times 12 = \boxed{72}$
Number: 6		Number: 72	

ELPS have been included in the form of a student-friendly language objective.

Debriefing questions are included to assist the teacher with facilitating a post-activity student discussion.

Debriefing Questions

- What multiplication equation did you match to the division equation? Why?
- Is there a different multiplication equation that can be used to help you determine the unknown value in the division equation?
- How did you determine the value that made each equation true?

Listen For . . .

- Understanding of using factors or products of multiplication equations to determine the unknown divisor, dividend, or quotient of a division equation.
- Understanding that the order of the factors does not change the product.
- Understanding that the order of the dividend and divisor may change the quotient as the same multiplication properties do not apply to division.

Communicating about Mathematics

Students may respond by talking to a partner and recording a written response in the space provided.

Possible sentence frame:
For the equation _____, the division equation can be solved with the multiplication equation _____ because _____.

Listen/Look For . . .

Appropriate use of vocabulary such as dividend, divisor, factor, product, and quotient, and appropriate placements of these values in the equation.

Each activity includes an opportunity for students to articulate and summarize their own learning. A sentence frame is provided for students who may need language support.

Key learning outcomes from the debriefing discussion are summarized here.

Key learning outcomes from the Communicating about Mathematics section are included here.