

Lesson 3: Partial Products in Algorithms

Standards Alignments

Addressing 5.OA.A.2
Building Towards 5.NBT.B.5

Teacher-facing Learning Goals

- Multiply a three-digit number and a two-digit number.
- Represent a partial products algorithm.

Student-facing Learning Goals

- Let's find partial products.

Lesson Purpose

The purpose of this lesson is for students to multiply multi-digit whole numbers using partial products.

In previous lessons, students multiplied three-digit numbers and two-digit numbers, using strategies based on place value and the properties of operations. Students used diagrams to illustrate and explain their partial products calculations.

In this lesson, students move from diagrams to an algorithm that records partial products which they used in an earlier course when multiplying a two-digit number and a two-digit number. Students relate partial product expressions to diagrams and then analyze a systematic way to record partial products. This work sets students up to learn the standard algorithm in the next lesson.

Access for:

Students with Disabilities

- Action and Expression (Activity 2)

English Learners

- MLR8 (Activity 1)

Instructional Routines

Which One Doesn't Belong? (Warm-up)

Materials to Copy

- Partial Product Expressions (groups of 2):
Activity 1

