

Common Factors and Multiples

Grade 6 The Number System

Topic: Common Factors and Multiples

Task Background

The task presents an opportunity for students to solve a common multiple problem.

Content Standards

- » Gain familiarity with factors and multiples.
 - » Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$.

Practice Standards

- » *Make sense of problems and persevere in solving them*
Students persevere using multiple representations for the number.
- » *Model with mathematics*
Students create drawings (e.g., open number lines or other representations) or other representations to model the number.

Materials

Students can use paper and writing tools, number line or Splat Square app, and/or a screen-recording app.

Finding Common Multiples Problem

In the harbor a blue light on shore blinks every 2 minutes. A light on a nearby dock blinks red every 3 minutes, When will they both be on at the same time?

How many times will they both be on at the same time in an hour?

Use a number line, 100 chart, or related app to check your thinking.