

Lesson 18: Using Common Multiples and Common Factors

Cool Down: What Kind of Problem?

1. For each problem, tell whether finding the answer requires finding a greatest common factor or a least common multiple. You do not need solve the problems.
 - a. Elena has 20 apples and 35 crackers for making snack bags. She wants to make as many snack bags as possible and wants each bag to have the same combination of apples and crackers. What is the largest number of snack bags she could make?
 - b. A string of holiday lights at a store have three colors that flash at different times. Red lights flash every fifth second. Blue lights flash every third seconds. Green light flashes every four seconds. The store owner turns on the lights. After how many seconds will all three lights flash at the same time for the first time?
 - c. A florist orders sunflowers every 6 days, starting from the sixth day of the year, and daisies every 4 days, starting from the fourth day of the year. When (or on which day) will she orders both kinds of flowers on the same day?
 - d. Noah has 12 yellow square cards and 18 green ones. All the cards are the same size. He would like to arrange the square cards into two rectangles—one of each color. He wants both the yellow and green rectangles to have the same height and to be as tall as possible. What is the tallest possible height for the two rectangles?
2. Explain how you know which problem(s) involves finding the greatest common factor.