Unit 2, Lesson 16

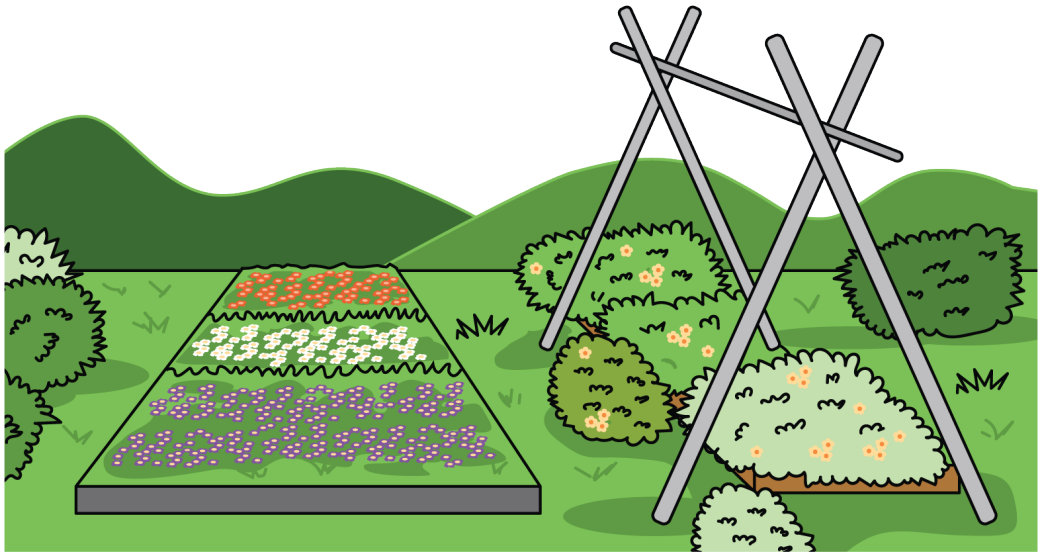
Estimate Products

Let's estimate products of a whole number and a fraction.

Warm-up

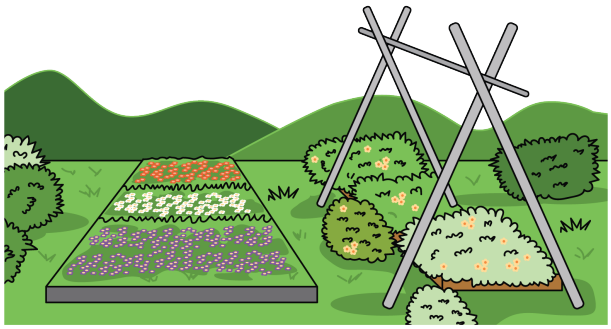
Notice and Wonder: Garden Size

What do you notice? What do you wonder?



Activity 1

Priya's Garden



Priya has enough materials to build a rectangular garden that covers 36 square feet. Choose **all** the side lengths that are reasonable for her garden. Explain your reasoning.

1. 9 feet by $4\frac{2}{3}$ feet

2. 9 feet by $3\frac{8}{9}$ feet

3. 12 feet by $2\frac{11}{12}$ feet

4. 9 feet by $2\frac{2}{3}$ feet

Activity 2

Too High, Too Low, Just about Right

1. Write a multiplication expression with whole numbers whose value is slightly less than, slightly greater than, or about equal to the value of $7 \times 12\frac{8}{9}$.

   a. slightly less:

   b. slightly greater:

   c. about equal to:

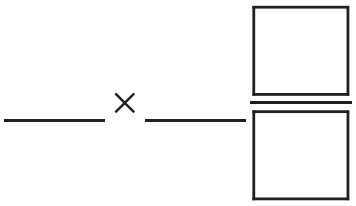
2. Write a multiplication expression with whole numbers whose value is slightly less than, slightly greater than, or about equal to the value of $9 \times 4\frac{2}{29}$.

   a. slightly less:

   b. slightly greater:

   c. about equal to:

3. Without calculating, use the numbers 2, 3, 5, 6, and 7, to complete the expression so it has a value close to 20.



4. Explain how you know your expression represents a value close to 20.