

PARCC Sample Item Grade 3 – The Field

Part A

A farmer plants $\frac{3}{4}$ of the field with soybeans. Dray the soybean to the field as many times as needed to show the fraction of the field that is planted with soybeans.

Farmer's Fields



Soybean

Part B

Type a fraction different than $\frac{3}{4}$ in the boxes that also represents the fractional part of the farmer's field that is planted with soybeans.

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{}}$$

Farmer's Fields



| | |
|--|--|
| Grade 3 | Fluency |
| Type | Type I, Claim A & C |
| Most relevant Stand(s) for Mathematical Content | 3.NF.1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. |
| Most relevant Standard(s) for Mathematical Practice | MP.2 enters in a simple way (Reason abstractly and qualitatively), as students in Grade 3 must link initially abstract symbols such as $3/4$ to the quantities they represent. MP.7 also enters (look for and make use of structure), since the task involves spatially structuring the grid, and since it requires close attention to the numerator and denominator of the given fraction. |
| Item description and assessment qualities | <p>This is an example of a fairly traditional fraction task in a technological setting. Note that the student is asked to show $3/4$ on a field that is divided into 8 equal parts. A student who drags only 3 soybeans onto the grid might be attending to the numerator of the given fraction but not the denominator. To find the answer, a student might mentally structure the grid so that it divides the field into 4 equal parts (e.g., four rows in the array shown).</p> <p>Unlike traditional multiple choice, it is difficult to guess the correct answer or use a choice elimination strategy. Unlike traditional multiple choice, there is more than one correct solution. Unlike paper and pencil tests, students can create a visual representation even though the task is scored automatically.</p> |
| Scoring | There are 28 possible ways to drag 6 soybeans onto a grid of 8 squares; all such responses are correct. Many students might fill the top three rows in the grid or the bottom three rows, as these two arrangements make it most obvious that $3/4$ of the field is planted. |