Math Released Item 2019

Grade 4

Community Garden 0216-M00278

Anchor Set A1 – A6

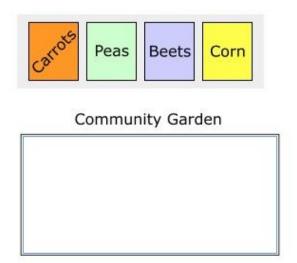
With Annotations

Prompt

Part A

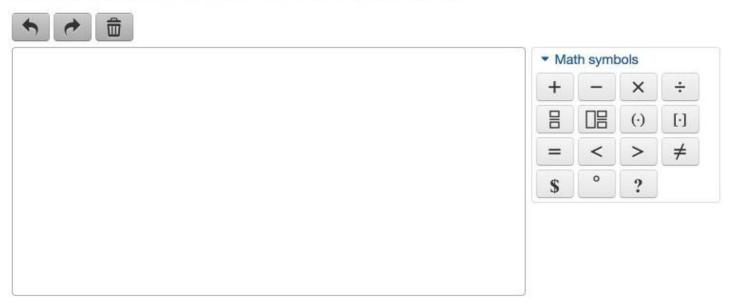
A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.



	M04_0216-M00278 Rubric Part A (Machine Scored)
Score	Description
	This part of the item is machine scored.
1	• Computation component = 1 point
	 Student response shows 5 sections of carrots, 1 section of peas, 1 section of corn, and 3 sections of beets.
0	The response is incorrect or irrelevant.
	M04_0216-M00278 Rubric Part B
Score	Description
	Student response includes each of the following 2 elements.
	• Computation component = 1 point
	\circ Correct fraction for beets, $\frac{3}{10}$
	Modeling component = 1 point
	 Valid work or explanation for how the fraction of beets was determined
2	Student sample response:
	$\frac{3}{10}$ of the garden is planted in beets because $\frac{10}{10} - \frac{5}{10} - \frac{1}{10} = \frac{4}{10}$.
	$\frac{3}{10}$ of the garden is planted in beets because there are more
	beets than corn planted.
	Or other valid response.
1	Student response includes 1 of the 2 elements.
0	The response is incorrect or irrelevant.

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and com. More of the garden is planted with beets than com. Find the number of sections of carrots, peas, beets, and com that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

$$\frac{1}{10}+\frac{5}{10}=\frac{6}{10}$$
 To figure out how much is left subtract $\frac{10}{10}$ by $\frac{6}{10}$.
$$\frac{10}{10}-\frac{6}{10}=\frac{4}{10} \text{ is left.} \qquad \frac{3}{10}=beets$$

$$\frac{1}{10}=corn$$

Anchor Paper 1

Part B: Score Point 2

This response receives full credit. The response includes each of the two required elements:

- The response provides the correct fraction for beets (3/10).
- The response provides correct work or explanation of how the fraction of beets was determined (1/10 + 5/10 = 6/10, 10/10 6/10 = 4/10) is left. 3/10 = 6/10, 10/10 = 6/10.

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Corn	Beets	Beets	Beets

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

 $\frac{3}{10}$ of the garden is beets. $\frac{5}{10} + \frac{1}{10} = \frac{6}{10}$ I still have $\frac{4}{10}$ of the garden to plant beets and corn. Since I am plating more beets than corn I am going to plant $\frac{1}{10}$ with corn and $\frac{3}{10}$ with beets. check: $\frac{5}{10} + \frac{1}{10} + \frac{1}{10} + \frac{3}{10} = \frac{10}{10}$ or 1.

Anchor Paper 2

Part B: Score Point 2

This response receives full credit. The response includes each of the two required elements:

- The response provides the correct fraction for beets (3/10).
- The response provides correct work or explanation of how the fraction of beets was determined $(5/10 + 1/10 = 6/10 \text{ I still have } 4/10 \text{ of the garden to plant beets and corn. Since I am plating more beets than corn I am going to plant <math>1/10$ with corn and 3/10 with beets . . . 5/10 + 1/0 + 1/10 + 3/10 = 10/10).

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

I knew that $\frac{3}{10}$ of the garden was beets because the rest of the garden was $\frac{7}{10}$ covered with other plants so I did $\frac{10}{10} - \frac{7}{10} = \frac{3}{10}$. That is how I found out that $\frac{3}{10}$ of the garden were beets.

Anchor Paper 3

Part B: Score Point 1

This response receives partial credit. The response includes one of the two required elements:

• The response provides the correct fraction for beets (3/10).

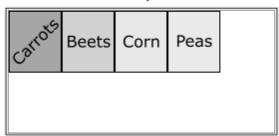
The response provides insufficient work or explanation of how the fraction of beets was determined (the rest of the garden was 7/10 covered with other plants so I did 10/10 - 7/10 = 3/10). Note that the response does not reference Part A as their explanation for 7/10 being covered. The response also does not show the work for 7/10. Therefore, credit cannot be given for this element.

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and com. More of the garden is planted with beets than com. Find the number of sections of carrots, peas, beets, and com that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Community Garden



Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

 $\frac{3}{10}$ thats how many beets were planted

Anchor Paper 4

Part B: Score Point 1

This response receives partial credit. The response includes one of the two required elements:

• The response provides the correct fraction for beets (3/10).

The response does not provide work or explanation of how the fraction of beets was determined.

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

Drag and drop the correct number of vegetable sections to build the garden.



Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Corn	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

 $\frac{2}{10}$ of the garden is planted with beets.

$$\frac{2}{10} + \frac{8}{10} = \frac{10}{10}$$
 or 1

Anchor Paper 5

Part B: Score Point 0

This response receives no credit. The response includes none of the two required elements:

The response provides an incorrect fraction for beets (2/10).

The response provides incorrect work or explanation of how the fraction of beets was determined (2/10 + 8/10 = 10/10 or 1). This work not only does not show how 8/10 is determined, 2/10 of the garden planted with beets means corn and beets are equal, which does not show understanding that the garden has more beets than corn.

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Drag and drop the correct number of vegetable sections to build the garden.



Community Garden

Carrots	Carrots	Peas	Peas	Beets
Beets	Corn	Corn		

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

$$\frac{6}{10} + \frac{2}{10} + \frac{2}{10} = \frac{10}{10}$$

Anchor Paper 6

Part B: Score Point 0

This response receives no credit. The response includes none of the two required elements:

The response provides an incorrect fraction for beets (10/10).

The response does not provide correct work or explanation of how the fraction of beets was determined (6/10 + 2/10 + 2/10 = 10/10. This work indicates that the garden has an equal amount of beets and corn, which does not show understanding that the garden has more beets than corn.

Practice Set P1 - P5

No Annotations Included

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and com. More of the garden is planted with beets than com. Find the number of sections of carrots, peas, beets, and corn that were planted.

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Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

 $rac{3}{10}$ is beets because theres more beets than corn but if there were to corn and two beats it would be equal but beats>corn

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

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Community Garden

Carrots	Peas	Beets	Corn	Carrots
Carrots	Peas	Peas	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

Only $\frac{2}{5}$ of the garden is planted with beets.

A community garden is divided into 10 equal sections. Carrots are planted in $\frac{5}{10}$ of the garden and peas are planted in $\frac{1}{10}$ of the garden. The rest of the garden is planted with beets and corn. More of the garden is planted with beets than corn. Find the number of sections of carrots, peas, beets, and corn that were planted.

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Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

$$\frac{3}{10}$$
 because $\frac{10}{10} - \frac{7}{10} = \frac{3}{10}$.

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Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Corn	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

$$\frac{\frac{1}{10}+\frac{5}{10}=\frac{6}{10}}{\frac{6}{10}-\frac{10}{10}=\frac{4}{10}}$$
 but you would have to subtract
$$\frac{6}{10}-\frac{10}{10}=\frac{4}{10}$$
 then you would take $\frac{2}{10}-\frac{4}{10}$ and it is $\frac{2}{10}$.

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Community Garden

Carrots	Carrots	Carrots	Carrots	Carrots
Peas	Beets	Beets	Beets	Corn

Part B

What fraction of the garden is planted only with beets? Show your work or explain your answer using equations.

Enter your answer and your work or explanation in the space provided.

well the graden is planted with $\frac{3}{10}$, that beets i know that that is the anwer because $\frac{5}{10}$ are filled with carrots, $\frac{1}{10}$ is filled with peas and the rest is filled with corn.

Practice Set

Paper	Score
P1	1
P2	0
Р3	1
P4	0
P5	1