Kentucky Summative Assessments



Grade 6 Mathematics Released Items 2025



MA0620096_2

There are a total of 85 marbles in a container. The container has only green and blue marbles. There are a total of 15 green marbles in the container. What is the ratio of the number of green marbles to the number of blue marbles in the container?

- **A** 3:17
- **B** 3:14
- **C** 11:14
- **D** 14:17



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620096

Book Question Number: 1

Standard: KY.6.RP.1

Item Type: MC

Key: B

Student Group	Number of	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
	Students			A (%)	B (%)	C (%)	D (%)
All Students	14,967	42%	0.42	22%	42%	19%	17%
Gender					'	'	
Female	6,957	40%	0.40	21%	40%	19%	20%
Male	8,010	43%	0.43	24%	43%	19%	15%
Ethnicity							
African American	1,744	33%	0.33	22%	33%	25%	21%
American Indian or Alaska Native	22	32%	0.32	36%	32%	32%	0%
Asian	335	58%	0.58	18%	58%	14%	10%
Hispanic or Latino	1,898	34%	0.34	22%	34%	26%	19%
Native Hawaiian or Pacific Islander	32	47%	0.47	19%	47%	25%	9%
White (non-Hispanic)	10,127	44%	0.44	22%	44%	17%	16%
Two or more races	809	40%	0.40	24%	40%	18%	18%
Migrant	117	32%	0.32	22%	32%	23%	23%
English Learner	1,539	27%	0.27	21%	27%	31%	21%
Economically Disadvantaged	9,599	37%	0.37	22%	37%	22%	19%
Students with Disabilities	4,010	30%	0.30	21%	30%	27%	22%

MA0620020_3

Which value is equivalent to $\frac{250}{40}$?

- **A** 6.1
- **B** 6.22
- **c** 6.25
- **D** 6.4



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620020

Book Question Number: 2

Standard: KY.6.NS.2.a

Item Type: MC

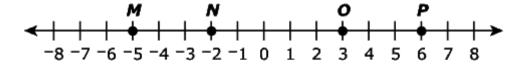
Key: C

Student Group	Number of	Percent	Average	Item Breakout Statistics - Answer Choice Option			
	Students	Correct	Item Score	A (%)	B (%)	C (%)	D (%)
All Students	10,615	58%	0.58	18%	14%	58%	9%
Gender					'		
Female	5,245	58%	0.58	18%	15%	58%	9%
Male	5,370	59%	0.59	19%	13%	59%	10%
Ethnicity							
African American	1,115	51%	0.51	18%	20%	51%	11%
American Indian or Alaska Native	12	50%	0.50	25%	17%	50%	8%
Asian	242	75%	0.75	13%	7%	75%	5%
Hispanic or Latino	934	55%	0.55	19%	16%	55%	10%
Native Hawaiian or Pacific Islander	14	50%	0.50	7%	14%	50%	29%
White (non-Hispanic)	7,717	59%	0.59	19%	13%	59%	9%
Two or more races	581	56%	0.56	19%	14%	56%	11%
Migrant	59	42%	0.42	20%	31%	42%	7%
English Learner	380	51%	0.51	17%	22%	51%	11%
Economically Disadvantaged	6,353	54%	0.54	19%	17%	54%	11%
Students with Disabilities	927	61%	0.61	13%	17%	61%	9%



MA0620125

Points M, N, O, and P are shown on the number line.

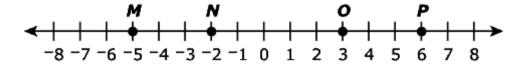


Select from the drop-down menus to correctly complete the sentence.

The absolute value of the coordinate of point M is Choose... \checkmark and the absolute value of the coordinate of point M is Choose... \checkmark the absolute value of the coordinate of point O.

Item Drop Down Options:

Points M, N, O, and P are shown on the number line.



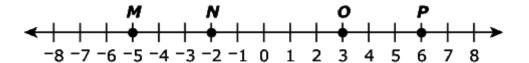
Select from the drop-down menus to correctly complete the sentence.

The absolute value of the coordinate of point M is absolute value of the coordinate of \checkmark Choose... greater than -5 less than -5 absolute value of the coordinate of point O.



Correct Answer:

Points M, N, O, and P are shown on the number line.



Select from the drop-down menus to correctly complete the sentence.

The absolute value of the coordinate of point M is greater than -5 and the absolute value of the coordinate of point M is greater than \checkmark the absolute value of the coordinate of point O.



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620125

Book Question Number: 3

Standard: KY.6.NS.7.d

Item Type: TE Key: see below

	Number of	Percent	Average	Item Breakout Statistics - Score Percentages			
Student Group	Students	Correct	Item Score	Score 0 (%)	Score 1 (%)		
All Students	32,086	26.9%	0.27	73%	27%		
Gender							
Female	15,884	24.6%	0.25	75%	25%		
Male	16,201	29.2%	0.29	71%	29%		
Ethnicity							
African American	3,259	15.3%	0.15	85%	15%		
American Indian or Alaska Native	42	14.3%	0.14	86%	14%		
Asian	720	43.6%	0.44	56%	44%		
Hispanic or Latino	2,779	19.0%	0.19	81%	19%		
Native Hawaiian or Pacific Islander	55	25.5%	0.25	75%	25%		
White (non-Hispanic)	23,455	29.1%	0.29	71%	29%		
Two or more races	1,775	24.9%	0.25	75%	25%		
Migrant	146	10.3%	0.10	90%	10%		
English Learner	1,103	10.6%	0.11	89%	11%		
Economically Disadvantaged	19,138	21.4%	0.21	79%	21%		
Students with Disabilities	2,864	18.4%	0.18	82%	18%		

Key: greater than -5, greater than



MA0620C6_00

Payton owns a store. Her customer would like to purchase several items for a garden.

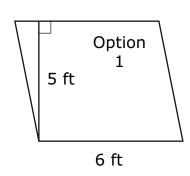
- A wooden wall sign with an area of 15 square feet
- Planter boxes that will hold at least 30 cubic feet of soil
- Decorative concrete blocks made of cement

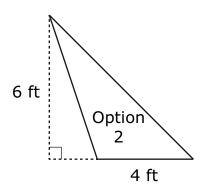
Formulas_6_G_1_3

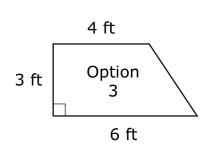
Figure	Area
Triangle	$A = \frac{1}{2}bh$
Rectangle	A = lw

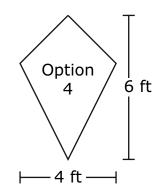
MA0620C6_01_3

Payton designed four different options for her customer to choose from for her wooden wall sign.









Which design option would best match her customer's described area for the wooden wall sign?

- **A** Option 1
- **B** Option 2
- **C** Option 3
- **D** Option 4



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620C6_01*

Book Question Number: 4

Standard: KY.6.G.1

Item Type: MC

Key: C

	Number of	Percent	Average Item Score	Item Breakout Statistics - Answer Choice Options			
Student Group	Students	Correct		A (%)	B (%)	C (%)	D (%)
All Students	21,468	37%	0.37	42%	13%	37%	8%
Gender			_		•		
Female	10,635	37%	0.37	42%	13%	37%	8%
Male	10,832	38%	0.38	42%	12%	38%	8%
Ethnicity					<u>'</u>		
African American	2,141	32%	0.32	41%	17%	32%	9%
American Indian or Alaska Native	30	27%	0.27	53%	13%	27%	7%
Asian	478	46%	0.46	41%	8%	46%	5%
Hispanic or Latino	1,848	33%	0.33	44%	13%	33%	9%
Native Hawaiian or Pacific Islander	41	37%	0.37	34%	15%	37%	15%
White (non-Hispanic)	15,735	38%	0.38	42%	12%	38%	8%
Two or more races	1,194	37%	0.37	43%	13%	37%	7%
	,		•		'	'	
Migrant	87	15%	0.15	48%	20%	15%	17%
	,		,		'	'	
English Learner	724	32%	0.32	40%	18%	32%	10%
Economically Disadvantaged	12,782	34%	0.34	43%	14%	34%	9%
Students with Disabilities	1,937	31%	0.31	41%	16%	31%	12%

^{*} Calculator section



Formulas_6_G_2

Figure	Volume
Right Rectangular Prism	V = Bh $V = lwh$

5

MA0620C6_02_2,5

The sizes of the planters that Payton has for sale are shown in the table, in feet (ft).

Planter Sizes

	Length (ft)	Width (ft)	Height (ft)	Area of Base (ft ²)
Planter 1	0.5	3.5	4	
Planter 2			5	6.25
Planter 3	2	2	3	
Planter 4			6	1.5
Planter 5	4.2	2.5	4	

Which planter sizes could the customer use to hold the correct amount of soil?

Select **two** correct answers.

- A Planter 1
- **B** Planter 2
- **C** Planter 3
- **D** Planter 4
- **E** Planter 5



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620C6_02*

Book Question Number: 5

Standard: KY.6.G.2

Item Type: MS

Key: B,E

	Number of	Percent Correct	Average	Item Breakout Statistics - Score Percentages			
Student Group	Students		Item Score	Score 0 (%)	Score 1 (%)	Score 2 (%)	
All Students	36,278	55.1%	1.10	18%	54%	28%	
Gender	, ,					•	
Female	17,518	54.8%	1.10	17%	56%	27%	
Male	18,759	55.4%	1.11	18%	53%	29%	
Ethnicity							
African American	3,851	48.5%	0.97	22%	58%	19%	
American Indian or Alaska Native	52	45.2%	0.90	29%	52%	19%	
Asian	811	64.7%	1.29	10%	51%	39%	
Hispanic or Latino	3,724	50.7%	1.01	21%	57%	22%	
Native Hawaiian or Pacific Islander	72	56.9%	1.14	13%	61%	26%	
White (non-Hispanic)	25,776	56.6%	1.13	17%	54%	30%	
Two or more races	1,991	53.7%	1.07	18%	56%	25%	
Migrant	203	47.8%	0.96	23%	58%	19%	
English Learner	2,234	45.6%	0.91	24%	60%	15%	
Economically Disadvantaged	22,259	51.5%	1.03	20%	57%	23%	
Students with Disabilities	5,897	47.9%	0.96	24%	57%	20%	

^{*} Calculator section



MA0620097

Lauren reads the same number of pages for 2 hours each day on Monday, Friday, Saturday, and Sunday. By the time she finishes reading on Sunday, she has read a total of 360 pages.

Select from the drop-down menus to correctly complete the sentence about Lauren's unit rate.

Lauren's unit rate is Choose..

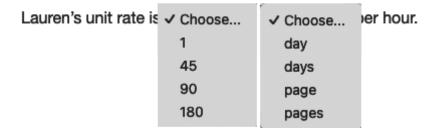
Choose..

per hour.

Item Drop Down Options:

Lauren reads the same number of pages for 2 hours each day on Monday, Friday, Saturday, and Sunday. By the time she finishes reading on Sunday, she has read a total of 360 pages.

Select from the drop-down menus to correctly complete the sentence about Lauren's unit rate.



Correct Answer:

Lauren reads the same number of pages for 2 hours each day on Monday, Friday, Saturday, and Sunday. By the time she finishes reading on Sunday, she has read a total of 360 pages.

Select from the drop-down menus to correctly complete the sentence about Lauren's unit rate.

Lauren's unit rate is $\begin{bmatrix} 45 & \checkmark \end{bmatrix}$ pages \checkmark per hour.



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620097*

Book Question Number: 6

Standard: KY.6.RP.2

Item Type: TE Key: see below

	Number of	Percent	Average	Item Breakout Statistics - Score Percentages			
Student Group	Students	Correct	Item Score	Score 0 (%)	Score 1 (%)		
All Students	10,615	47.1%	0.47	53%	47%		
Gender							
Female	5,246	42.9%	0.43	57%	43%		
Male	5,369	51.2%	0.51	49%	51%		
Ethnicity							
African American	1,114	30.3%	0.30	70%	30%		
American Indian or Alaska Native	12	58.3%	0.58	42%	58%		
Asian	242	61.6%	0.62	38%	62%		
Hispanic or Latino	934	38.3%	0.38	62%	38%		
Native Hawaiian or Pacific Islander	14	35.7%	0.36	64%	36%		
White (non-Hispanic)	7,718	50.5%	0.51	49%	51%		
Two or more races	581	42.3%	0.42	58%	42%		
Migrant	59	47.5%	0.47	53%	47%		
English Learner	380	23.4%	0.23	77%	23%		
Economically Disadvantaged	6,353	41.8%	0.42	58%	42%		
Students with Disabilities	927	35.8%	0.36	64%	36%		

Key: 45,pages

^{*} Calculator section



MA0620171 1

A student wants to study the effect of water on the growth of plants. Which method is the correct method of collecting the data required for the study?

- A Take two plants, M and N, of the same type and place them out in the same conditions.

 Water plant M more than plant N every day, and record the height of each plant at the end of every week.
- B Take two plants, M and N, of different types and place them out in the same conditions.

 Water plant M more than plant N every day, and record the height of each plant at the end of every week.
- C Take two plants, M and N, of different types and place them out in the same conditions.

 Water both plants with the same amount every day, and record the height of each plant at the end of every week.
- D Take two plants, M and N, of the same type and place them out in the same conditions.

 Water both plants with the same amount every day, and record the height of each plant at the end of every week.



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0620171*

Book Question Number: 7

Standard: KY.6.SP.0.b

Item Type: MC

Key: A

	Number of	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
Student Group	Students			A (%)	В (%)	C (%)	D (%)
All Students	10,648	50%	0.50	50%	20%	21%	9%
Gender							
Female	5,247	50%	0.50	50%	19%	23%	9%
Male	5,400	50%	0.50	50%	21%	20%	9%
Ethnicity							
African American	1,074	32%	0.32	32%	28%	28%	11%
American Indian or Alaska Native	15	27%	0.27	27%	33%	20%	20%
Asian	244	64%	0.64	64%	15%	12%	9%
Hispanic or Latino	919	44%	0.44	44%	22%	24%	10%
Native Hawaiian or Pacific Islander	26	35%	0.35	35%	19%	35%	12%
White (non-Hispanic)	7,767	53%	0.53	53%	18%	20%	8%
Two or more races	602	46%	0.46	46%	22%	25%	8%
Migrant	38	45%	0.45	45%	26%	16%	13%
English Learner	360	28%	0.28	28%	27%	30%	15%
Economically Disadvantaged	6,327	43%	0.43	43%	23%	24%	10%
Students with Disabilities	933	38%	0.38	38%	20%	26%	15%

^{*} Calculator section

MA0621029_4

Michael keeps a record of when the school bus arrives at his stop. He uses negative numbers to represent how many minutes the bus arrives early. Michael uses positive numbers to represent how many minutes the bus arrives late. In this situation, what is the meaning of zero?

- **A** How late the bus arrives
- **B** How often the bus is on time
- **C** The number of times the bus is early
- **D** The time the bus is scheduled to arrive



Kentucky Summative Assessments

Spring 2025 Grade 6 Mathematics

Item: MA0621029*

Book Question Number: 8

Standard: KY.6.NS.5

Item Type: MC

Key: D

	Number of	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
Student Group	Students			A (%)	B (%)	C (%)	D (%)
All Students	47,026	42%	0.42	9%	36%	13%	42%
Gender							
Female	22,832	40%	0.40	10%	37%	13%	40%
Male	24,193	44%	0.44	9%	35%	13%	44%
Ethnicity	,		•		'	'	1
African American	4,993	31%	0.31	15%	35%	20%	31%
American Indian or Alaska Native	64	38%	0.38	9%	34%	19%	38%
Asian	1,055	50%	0.50	6%	37%	7%	50%
Hispanic or Latino	4,677	37%	0.37	11%	35%	18%	37%
Native Hawaiian or Pacific Islander	87	37%	0.37	10%	46%	7%	37%
White (non-Hispanic)	33,566	44%	0.44	8%	36%	11%	44%
Two or more races	2,583	39%	0.39	11%	37%	14%	39%
	,		•		'	'	1
Migrant	263	38%	0.38	14%	31%	16%	38%
			,		'	'	1
English Learner	2,640	28%	0.28	16%	29%	27%	28%
	· '						
Economically Disadvantaged	28,717	38%	0.38	11%	35%	15%	38%
Students with Disabilities	6,870	31%	0.31	16%	32%	21%	31%

^{*} Calculator section



Investing in Kentucky's Future, One Student at a Time