# **Kentucky Summative Assessments**



# Grade 4 Mathematics Released Items 2025



Mathematics

1

MA0420054\_3

What is the sum of  $\frac{3}{10}$  and  $\frac{32}{100}$ ?

- **A**  $\frac{62}{110}$
- **B**  $\frac{35}{110}$
- **c**  $\frac{62}{100}$
- **D**  $\frac{35}{100}$



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420054

**Book Question Number: 1** 

Standard: KY.4.NF.5.b

**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	10,840	51%	0.51	7%	15%	51%	27%
Gender						,	
Female	5,379	49%	0.49	6%	16%	49%	28%
Male	5,461	54%	0.54	7%	14%	54%	25%
Ethnicity							
African American	1,144	40%	0.40	8%	22%	40%	30%
American Indian or Alaska Native	16	56%	0.56	0%	13%	56%	31%
Asian	223	68%	0.68	4%	9%	68%	18%
Hispanic or Latino	949	47%	0.47	6%	19%	47%	28%
Native Hawaiian or Pacific Islander	19	74%	0.74	5%	11%	74%	11%
White (non-Hispanic)	7,872	53%	0.53	6%	14%	53%	26%
Two or more races	617	48%	0.48	9%	14%	48%	29%
Migrant	46	39%	0.39	4%	22%	39%	35%
English Learner	770	43%	0.43	7%	20%	43%	30%
Economically Disadvantaged	6,624	46%	0.46	7%	18%	46%	29%
Students with Disabilities	1,517	38%	0.38	9%	22%	38%	31%

MA0420199\_5,1

A comparison is shown.

$$\frac{4}{6}$$
 >  $\square$ 

Which fractions make the comparison true?

Select **two** correct answers.

- **A**  $\frac{1}{2}$
- **B**  $\frac{2}{3}$
- **c**  $\frac{3}{4}$
- **D**  $\frac{10}{12}$
- **E**  $\frac{7}{100}$



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420199

**Book Question Number: 2** 

Standard: KY.4.NF.2

**Item Type:** MS

Key: A,E

	Number of	Percent	Average	Item Breakou	t Statistics - Score	e Percentages
Student Group	Students	Correct	Item Score	Score 0 (%)	Score 1 (%)	Score 2 (%)
All Students	24,426	53.2%	1.06	22%	49%	28%
Gender						
Female	11,922	50.8%	1.02	23%	53%	24%
Male	12,503	55.4%	1.11	22%	46%	32%
Ethnicity						
African American	2,684	43.5%	0.87	28%	56%	15%
American Indian or Alaska Native	27	51.9%	1.04	22%	52%	26%
Asian	541	62.4%	1.25	18%	39%	43%
Hispanic or Latino	2,709	46.4%	0.93	27%	54%	20%
Native Hawaiian or Pacific Islander	47	56.4%	1.13	17%	53%	30%
White (non-Hispanic)	17,046	55.7%	1.11	20%	48%	32%
Two or more races	1,370	50.3%	1.01	24%	52%	25%
Migrant	157	43.0%	0.86	28%	58%	14%
English Learner	2,540	42.1%	0.84	30%	55%	14%
			·			
Economically Disadvantaged	15,432	48.4%	0.97	25%	53%	22%
			·			
Students with Disabilities	5,063	44.6%	0.89	27%	57%	16%



MA0420031\_3

Which expression can be used to find the product of 48 and 23?

**A** 
$$(3 \times 8) + (3 \times 40) + (2 \times 8) + (2 \times 40)$$

**B** 
$$(8 \times 3) + (8 \times 20) + (4 \times 3) + (4 \times 20)$$

**C** 
$$(8 \times 3) + (8 \times 20) + (40 \times 3) + (40 \times 20)$$

**D** 
$$(3 \times 8) + (3 \times 40) + (20 \times 80) + (20 \times 40)$$



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420031

**Book Question Number:** 3

Standard: KY.4.NBT.5

**Item Type:** MC

Key: C

	Number of	Percent	Average	Item Break	out Statistics	- Answer Cho	ice Options
Student Group	Students	Correct	Item Score	A (%)	B (%)	C (%)	D (%)
All Students	10,832	49%	0.49	18%	20%	49%	13%
Gender						,	
Female	5,376	48%	0.48	18%	20%	48%	14%
Male	5,456	51%	0.51	17%	21%	51%	11%
Ethnicity							
African American	1,143	44%	0.44	20%	23%	44%	13%
American Indian or Alaska Native	16	38%	0.38	38%	19%	38%	6%
Asian	222	60%	0.60	15%	14%	60%	11%
Hispanic or Latino	943	46%	0.46	19%	20%	46%	15%
Native Hawaiian or Pacific Islander	19	58%	0.58	5%	32%	58%	5%
White (non-Hispanic)	7,872	50%	0.50	17%	20%	50%	12%
Two or more races	617	49%	0.49	18%	19%	49%	14%
Migrant	44	39%	0.39	27%	23%	39%	11%
English Learner	764	39%	0.39	21%	24%	39%	16%
Economically Disadvantaged	6,621	45%	0.45	19%	22%	45%	14%
Students with Disabilities	1,517	42%	0.42	20%	22%	42%	15%



MA0421086

What is the value of the expression 493  $\div$  7? Explain the strategy you used to find your answer.

Enter your answer and your explanation in the space provided.



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0421086

**Book Question Number:** 4

Standard: KY.4.NBT.6

Item Type: SA Key: Rubric

	Number of	Percent	Average	Item Breakout Statistics - Score Percentages				
Student Group	Students	Correct	Item Score	Score 0 (%)	Score 1 (%)	Score 2 (%)		
All Students	45,750	27.0%	0.54	63%	21%	17%		
Gender								
Female	22,531	26.5%	0.53	64%	20%	17%		
Male	23,218	27.4%	0.55	62%	22%	16%		
Ethnicity								
African American	4,828	15.6%	0.31	77%	14%	9%		
American Indian or Alaska Native	42	27.4%	0.55	60%	26%	14%		
Asian	1,023	45.2%	0.90	42%	26%	32%		
Hispanic or Latino	4,626	19.6%	0.39	72%	17%	11%		
Native Hawaiian or Pacific Islander	75	30.7%	0.61	60%	19%	21%		
White (non-Hispanic)	32,519	29.3%	0.59	59%	22%	18%		
Two or more races	2,634	24.5%	0.49	66%	20%	15%		
Migrant	245	16.7%	0.33	74%	18%	8%		
English Learner	4,094	15.6%	0.31	77%	15%	8%		
Economically Disadvantaged	28,521	21.4%	0.43	69%	19%	12%		
Students with Disabilities	8,121	19.5%	0.39	68%	24%	7%		

# Rubric

	Rubric
Score Point 2	Student demonstrates a complete understanding of the division of a three-digit number by a one-digit number.
Score Point 1	Student demonstrates a partial understanding of the division of a three-digit number by a one-digit number.
Score Point 0	Student response is completely incorrect or irrelevant.
Score Points	<ul> <li>Score 2 points:         <ul> <li>Correct answer and complete explanation</li> </ul> </li> <li>Score 1 point:         <ul> <li>Correct answer only OR</li> <li>Incorrect answer (due to computation error) and complete explanation.</li> </ul> </li> </ul>
Correct Answers	70 Remainder 3 7 × 70 = 490 493 – 490 = 3 Note: Other valid explanations of strategies are acceptable.

# **Anchor Set**

**A1** 

The expression  $493 \div 7$  my answer is 112 and I know this because i wrok my out on a bar motle, first i see how many times 3 can go into 7 next I see how many times 7 go into 9 finley see how many times 4 go into 7 then therfor I got 112.

#### Anchor Annotation, Paper 1 Score Point 0

This response receives no credit. The student demonstrates no understanding of the task. Neither of the required elements are given.

The answer given is incorrect (112) and the student gives an incorrect explanation of the bar model.

**A2** 

By doing the box i got 80R3.

#### Anchor Annotation, Paper 2 Score Point 0

This response receives no credit. The student demonstrates no understanding of the task. Neither of the required elements are given.

The answer given is incorrect (80R3) and the explanation is insufficient. Naming a method without showing steps is not acceptable for credit.

**A3** 

 $493 \div 7$  I got my answer by using long division, First I did  $7 \div 49$  and got 49 I subtracted 49 from 49 and got 0 but i brought down the 3 to get  $03 \neg 0$  leaving me to my final answer 170 r3. as a result  $493 \div 7$  is 170 r3.

#### Anchor Annotation, Paper 3 Score Point 0

This response receives no credit. The student demonstrates no understanding of the task. Neither of the required elements are given.

The answer given is incorrect (170 r3) and the explanation is unclear (I did  $7 \div 49$  and got 49).

70 and remainder of 3.

I used the box method to find my answer.

#### Anchor Annotation, Paper 4 Score Point 1

This response receives partial credit. The student demonstrates general understanding of the task. One of the two required elements is given.

The correct answer is given (70 and remainder of 3). The explanation is insufficient. Naming a method without showing steps is not acceptable for credit.

**A5** 

i used area model and got the answer 70 with remainder of 3.

#### Anchor Annotation, Paper 5 Score Point 1

This response receives partial credit. The student demonstrates general understanding of the task. One of the two required elements is given.

The correct answer is given (70 with remainder of 3). The explanation is insufficient. Naming a method without showing steps is not acceptable for credit.

**A6** 

 $493 \div 7 = 70 \text{ R}3$ 

#### Anchor Annotation, Paper 6 Score Point 1

This response receives partial credit. The student demonstrates general understanding of the task. One of the two required elements is given.

The correct answer is given (70 R3). No explanation is provided.

The value of the expression  $493 \div 7$  is 70 with a remainder of 3 I know this because I did 493 - 350 = 143, 143 - 140 = 3 and I can't subtract from three so three became the remainder. And then I added 50 from  $7 \times 50$ , 20 from  $7 \times 20$ , and I added it all togetter making 70.

#### Anchor Annotation, Paper 7 Score Point 2

This response receives full credit. The student demonstrates a complete understanding of the task. Both of the required elements are given.

The correct answer is given (70 with a remainder of 3) with a complete explanation of the method.

Note: Be aware of alternate acceptable methods.

**A8** 

 $493 \div 7 = 70 \frac{3}{7}$ . I knew to divide because I needed to find the quotient of  $493 \div 7$ . I used long division by setting up my digits. 493 inside the cave, 7 outside, and the quotient on the top, when we get to that. I first had to divide  $49 \div 7 = 7$ , That 7 went on the top. Then, I multiplied  $7 \times 7 = 49$ . I subtracted 49 - 49 = 0, Then I brought down the 3. 7 can't fit in 3, so I wrote 0, and put the 3 as a remainder. ThenI had my final answer, 70,

# Anchor Annotation, Paper 8 Score Point 2

This response receives full credit. The student demonstrates a complete understanding of the task. Both of the required elements are given.

The correct answer is given  $(70\frac{3}{7})$  with a complete explanation of the method.

For this problem I used long division.I did

 $493 \div 7.49 \div 7 = 7.7 \times 7 = 49.49 - 49 = 0$ . Bring down your 3 7 goes into 3 0 times so put your 0 up top now you have 70 you can not do anything with your 3 so you have a remainder. The answer is 70 R 3

# **Anchor Annotation, Paper 9 Score Point 2**

This response receives full credit. The student demonstrates a complete understanding of the task. Both of the required elements are given.

The correct answer is given (70 R 3) with a complete explanation of the method.



MA0420009\_3

Which number is a multiple of 4?

- **A** 2
- **B** 30
- **C** 68
- **D** 94



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420009

**Book Question Number: 5** 

Standard: KY.4.OA.4.c

**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	24,693	37%	0.37	52%	6%	37%	6%
Gender			•		•		
Female	12,054	35%	0.35	53%	6%	35%	6%
Male	12,638	39%	0.39	50%	6%	39%	6%
Ethnicity							
African American	2,672	26%	0.26	58%	8%	26%	8%
American Indian or Alaska Native	19	42%	0.42	47%	11%	42%	0%
Asian	571	47%	0.47	45%	3%	47%	4%
Hispanic or Latino	2,761	29%	0.29	57%	7%	29%	6%
Native Hawaiian or Pacific Islander	43	40%	0.40	47%	12%	40%	2%
White (non-Hispanic)	17,211	40%	0.40	50%	5%	40%	5%
Two or more races	1,413	35%	0.35	54%	5%	35%	6%
Migrant	154	32%	0.32	55%	8%	32%	6%
English Learner	2,631	26%	0.26	60%	8%	26%	6%
Economically Disadvantaged	15,662	33%	0.33	54%	7%	33%	6%
Students with Disabilities	5,206	27%	0.27	53%	10%	27%	9%



MA0420010\_3

Which list contains only prime numbers?

- **A** 2, 3, 17, 21, 61
- **B** 3, 5, 11, 15, 19
- **c** 2, 19, 23, 31, 47
- **D** 3, 17, 33, 41, 52



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420010

**Book Question Number:** 6

Standard: KY.4.OA.4.d

**Item Type:** MC

Key: C

	Number of	Percent	Average	Item Breakout Statistics - Answer Choice Option			
Student Group	Students	Correct	Item Score	A (%)	B (%)	C (%)	D (%)
All Students	35,557	35%	0.35	20%	31%	35%	14%
Gender	,				'	'	
Female	17,383	34%	0.34	21%	31%	34%	15%
Male	18,173	36%	0.36	19%	31%	36%	14%
Ethnicity							
African American	3,791	27%	0.27	24%	34%	27%	14%
American Indian or Alaska Native	27	22%	0.22	33%	33%	22%	11%
Asian	807	47%	0.47	14%	25%	47%	13%
Hispanic or Latino	3,750	29%	0.29	21%	34%	29%	15%
Native Hawaiian or Pacific Islander	57	37%	0.37	18%	30%	37%	16%
White (non-Hispanic)	25,057	36%	0.36	19%	30%	36%	14%
Two or more races	2,065	35%	0.35	20%	31%	35%	14%
Migrant	206	22%	0.22	20%	37%	22%	21%
						,	
English Learner	3,395	26%	0.26	23%	36%	26%	15%
Economically Disadvantaged	22,382	31%	0.31	22%	33%	31%	15%
	<u>'</u>				•		
Students with Disabilities	6,785	27%	0.27	24%	34%	27%	16%



#### MA0421218\_1

Which shape will always have more than two lines of symmetry?

- **A** Circle
- **B** Triangle
- **C** Rectangle
- **D** Pentagon



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0421218\*

**Book Question Number:** 7

Standard: KY.4.G.3.b

**Item Type:** MC

Key: A

	Number of	Percent Ave	Average	Item Breakout Statistics - Answer Choice Options			
Student Group	Students	Correct	Item Score	A (%)	B (%)	C (%)	D (%)
All Students	21,832	37%	0.37	37%	9%	32%	23%
Gender							
Female	10,773	35%	0.35	35%	9%	31%	24%
Male	11,059	38%	0.38	38%	9%	32%	22%
Ethnicity							
African American	2,222	22%	0.22	22%	14%	37%	27%
American Indian or Alaska Native	16	13%	0.13	13%	19%	38%	31%
Asian	486	46%	0.46	46%	8%	31%	15%
Hispanic or Latino	1,967	28%	0.28	28%	11%	33%	27%
Native Hawaiian or Pacific Islander	30	23%	0.23	23%	7%	30%	40%
White (non-Hispanic)	15,811	40%	0.40	40%	8%	31%	22%
Two or more races	1,299	35%	0.35	35%	10%	32%	23%
Migrant	93	26%	0.26	26%	17%	32%	25%
English Learner	1,596	24%	0.24	24%	14%	34%	28%
Economically Disadvantaged	13,470	31%	0.31	31%	11%	33%	26%
Students with Disabilities	3,195	28%	0.28	28%	14%	30%	27%

<sup>\*</sup> Calculator section



MA0420068\_2

How many inches are in  $3\frac{1}{2}$  feet?

- **A** 38
- **B** 42
- **C** 60
- **D** 72



# **Kentucky Summative Assessments**

Spring 2025 Grade 4 Mathematics

Item: MA0420068\*

**Book Question Number: 8** 

Standard: KY.4.MD.1.b

Item Type: MC

Key: B

	Number of Percen	Porcont	Average	Item Breakout Statistics - Answer Choice Options			
Student Group	Students	Correct	Item Score	A (%)	B (%)	C (%)	D (%)
All Students	10,832	51%	0.51	30%	51%	12%	6%
Gender					•		
Female	5,376	46%	0.46	33%	46%	14%	8%
Male	5,456	57%	0.57	28%	57%	10%	5%
Ethnicity							
African American	1,143	38%	0.38	36%	38%	18%	7%
American Indian or Alaska Native	16	31%	0.31	44%	31%	19%	6%
Asian	222	62%	0.62	23%	62%	9%	7%
Hispanic or Latino	944	47%	0.47	34%	47%	13%	7%
Native Hawaiian or Pacific Islander	19	53%	0.53	11%	53%	32%	5%
White (non-Hispanic)	7,871	54%	0.54	29%	54%	11%	6%
Two or more races	617	47%	0.47	31%	47%	15%	7%
Migrant	44	39%	0.39	39%	39%	16%	7%
English Learner	764	41%	0.41	37%	41%	15%	6%
Economically Disadvantaged	6,621	46%	0.46	33%	46%	14%	7%
Students with Disabilities	1,517	44%	0.44	33%	44%	15%	8%

<sup>\*</sup> Calculator section



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