

# Kentucky Summative Assessments



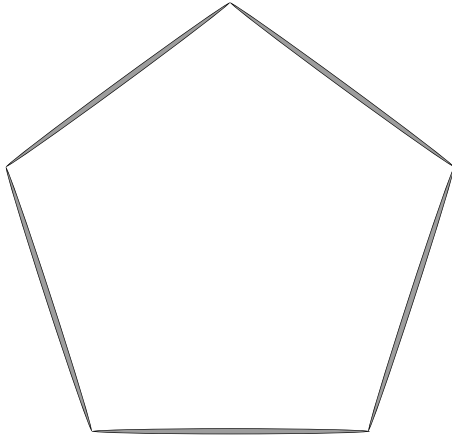
## Grade 3 Mathematics Released Items 2024



1

MA0321134\_1

A student made a polygon out of toothpicks, as shown.



Then the student took away 2 toothpicks and made a new polygon. What was the new polygon the student made?

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



# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0321134

Book Question Number: 1

Standard: KY.3.G.1.a

Item Type: MC

Key: A

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	24,826	55%	0.55	55%	15%	4%	26%
Gender							
Female	12,157	56%	0.56	56%	16%	4%	25%
Male	12,669	55%	0.55	55%	14%	4%	28%
Ethnicity							
African American	2,585	40%	0.40	40%	24%	6%	30%
American Indian or Alaska Native	26	65%	0.65	65%	12%	4%	19%
Asian	484	64%	0.64	64%	10%	4%	22%
Hispanic or Latino	2,078	51%	0.51	51%	18%	4%	27%
Native Hawaiian or Pacific Islander	45	58%	0.58	58%	18%	2%	22%
White (non-Hispanic)	18,155	58%	0.58	58%	13%	3%	26%
Two or more races	1,453	52%	0.52	52%	16%	4%	28%
Migrant							
Migrant	119	49%	0.49	49%	15%	5%	31%
English Learner							
English Learner	1,807	47%	0.47	47%	19%	5%	29%
Economically Disadvantaged							
Economically Disadvantaged	15,679	49%	0.49	49%	18%	4%	29%
Students with Disabilities							
Students with Disabilities	3,965	46%	0.46	46%	18%	5%	30%

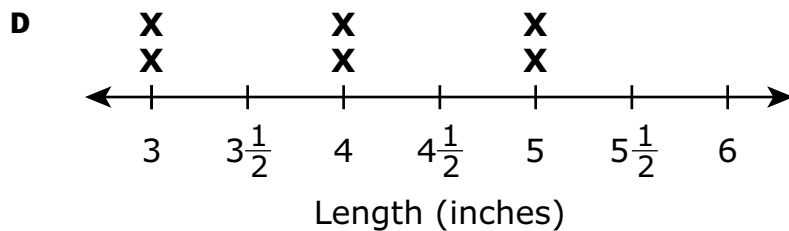
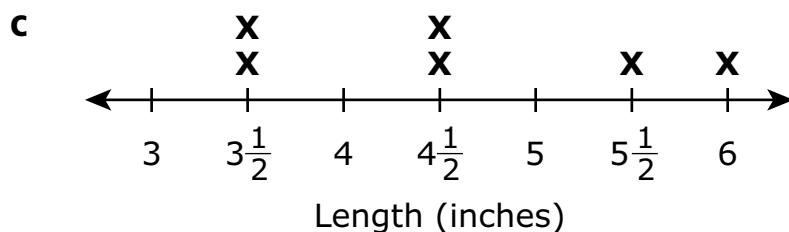
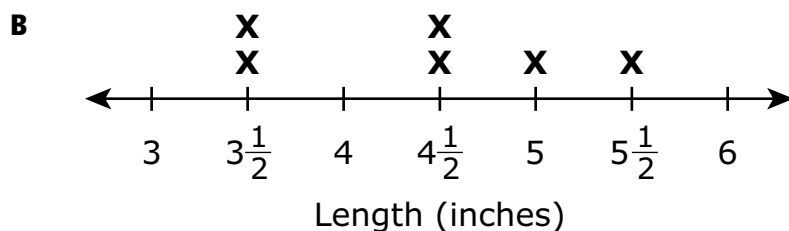
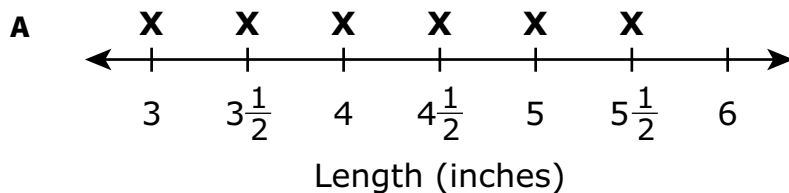


MA0320074\_2

A student measured the lengths of six pencils. The list shows the lengths, in inches, of each pencil.

$$5, 4\frac{1}{2}, 3\frac{1}{2}, 5\frac{1}{2}, 3\frac{1}{2}, 4\frac{1}{2}$$

Which dot plot shows the lengths, in inches, of the pencils?





# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320074

Book Question Number: 2

Standard: KY.3.MD.4.c

Item Type: MC

Key: B

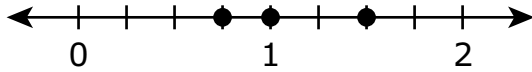
Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	39,725	57%	0.57	21%	57%	14%	8%
Gender							
Female	19,421	57%	0.57	21%	57%	14%	8%
Male	20,304	57%	0.57	21%	57%	14%	8%
Ethnicity							
African American	4,223	46%	0.46	27%	46%	17%	9%
American Indian or Alaska Native	46	48%	0.48	28%	48%	13%	11%
Asian	838	69%	0.69	15%	69%	11%	5%
Hispanic or Latino	3,827	52%	0.52	21%	52%	18%	9%
Native Hawaiian or Pacific Islander	74	61%	0.61	19%	61%	16%	4%
White (non-Hispanic)	28,404	59%	0.59	20%	59%	13%	8%
Two or more races	2,312	55%	0.55	22%	55%	15%	8%
Migrant							
Migrant	219	51%	0.51	25%	51%	16%	8%
English Learner							
English Learner	3,696	50%	0.50	23%	50%	18%	9%
Economically Disadvantaged							
Economically Disadvantaged	25,454	52%	0.52	23%	52%	15%	9%
Students with Disabilities							
Students with Disabilities	7,574	48%	0.48	26%	48%	15%	11%



3

MA0320065\_1,2

A student correctly plotted three points on the number line shown to represent three different fractions.



Which fractions are represented on the student's number line?

Select **two** correct answers.

**A**  $\frac{6}{4}$

**B**  $\frac{3}{4}$

**C**  $\frac{4}{8}$

**D**  $\frac{3}{8}$

**E**  $\frac{1}{4}$



# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320065

Book Question Number: 3

Standard: KY.3.NF.2.b

Item Type: MS

Key: A,B

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Score Percentages		
				Score 0 (%)	Score 1 (%)	Score 2 (%)
All Students	27,141	51.9%	1.04	28%	41%	31%
Gender						
Female	13,288	49.2%	0.98	30%	41%	29%
Male	13,853	54.4%	1.09	25%	42%	34%
Ethnicity						
African American	2,870	48.1%	0.96	26%	51%	23%
American Indian or Alaska Native	33	59.1%	1.18	24%	33%	42%
Asian	600	61.7%	1.23	22%	33%	45%
Hispanic or Latino	2,786	48.4%	0.97	28%	48%	24%
Native Hawaiian or Pacific Islander	53	59.4%	1.19	23%	36%	42%
White (non-Hispanic)	19,247	52.8%	1.06	28%	39%	33%
Two or more races	1,551	49.7%	0.99	30%	41%	29%
Migrant						
Migrant	162	49.4%	0.99	25%	52%	23%
English Learner						
English Learner	2,789	47.7%	0.95	27%	51%	22%
Economically Disadvantaged						
Economically Disadvantaged	17,456	49.3%	0.99	28%	45%	27%
Students with Disabilities						
Students with Disabilities	5,505	49.9%	1.00	25%	51%	24%



4

MA0320127\_1

There are 428 students who attend Claire's school. There are 322 more students who attend Tony's school than who attend Claire's school. Which pair of steps can be used to find the number of students who attend Tony's school?

- A** Finding the sum of 400 and 300 and then finding the sum of 28 and 22
- B** Finding the sum of 400 and 300 and then finding the difference between 28 and 22
- C** Finding the difference between 400 and 300 and then finding the sum of 28 and 22
- D** Finding the difference between 400 and 300 and then finding the difference between 28 and 22





# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320127

Book Question Number: 4

Standard: KY.3.NBT.2

Item Type: MC

Key: A

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	21,121	51%	0.51	51%	17%	15%	18%
Gender							
Female	10,372	49%	0.49	49%	17%	15%	19%
Male	10,748	52%	0.52	52%	16%	15%	17%
Ethnicity							
African American	2,271	45%	0.45	45%	21%	17%	17%
American Indian or Alaska Native	29	48%	0.48	48%	14%	24%	14%
Asian	498	52%	0.52	52%	15%	13%	19%
Hispanic or Latino	2,222	42%	0.42	42%	19%	18%	20%
Native Hawaiian or Pacific Islander	35	43%	0.43	43%	11%	23%	23%
White (non-Hispanic)	14,861	53%	0.53	53%	16%	14%	18%
Two or more races	1,203	51%	0.51	51%	17%	16%	16%
Migrant							
Migrant	131	40%	0.40	40%	21%	17%	21%
English Learner							
English Learner	2,322	41%	0.41	41%	20%	18%	21%
Economically Disadvantaged							
Economically Disadvantaged	13,673	47%	0.47	47%	19%	16%	18%
Students with Disabilities							
Students with Disabilities	4,543	43%	0.43	43%	19%	17%	21%



5

MA0320020

Sophie buys a total of 64 toy airplanes. The airplanes are sold in packages. There are 8 airplanes in each package.

- Write an equation that can be used to represent this situation.
- What is the total number of packages of airplanes that Sophie buys?

Enter **only** your equation and your answer in the space provided.

Equation:

Number of packages of toy airplanes:




# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320020

Book Question Number: 5

Standard: KY.3.OA.3

Item Type: SA

Key: Rubric

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Score Percentages		
				Score 0 (%)	Score 1 (%)	Score 2 (%)
All Students	30,972	56.0%	1.12	34%	19%	46%
Gender						
Female	15,233	55.1%	1.10	36%	18%	46%
Male	15,738	56.8%	1.14	33%	20%	47%
Ethnicity						
African American	3,210	40.6%	0.81	50%	20%	31%
American Indian or Alaska Native	35	55.7%	1.11	34%	20%	46%
Asian	627	71.9%	1.44	20%	16%	64%
Hispanic or Latino	2,535	48.9%	0.98	41%	21%	38%
Native Hawaiian or Pacific Islander	51	59.8%	1.20	27%	25%	47%
White (non-Hispanic)	22,723	58.6%	1.17	32%	19%	49%
Two or more races	1,790	54.2%	1.08	36%	20%	44%
Migrant						
Migrant	145	43.1%	0.86	46%	21%	32%
English Learner						
English Learner	2,226	48.1%	0.96	41%	22%	37%
Economically Disadvantaged						
Economically Disadvantaged	19,525	49.4%	0.99	40%	20%	39%
Students with Disabilities						
Students with Disabilities	4,880	43.1%	0.86	48%	19%	34%

**6**

MA0320158\_2

There are 40 third graders going on a field trip to the zoo. A teacher puts the students into 4 equal groups. Which equation can be used to represent this situation?

**A**  $40 \div 5 = 8$

**B**  $4 \times 10 = 40$

**C**  $14 + 26 = 40$

**D**  $40 - 14 = 26$



# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320158

Book Question Number: 6

Standard: KY.3.OA.7

Item Type: MC

Key: B

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	45,914	68%	0.68	23%	68%	6%	4%
Gender							
Female	22,514	68%	0.68	23%	68%	6%	4%
Male	23,399	69%	0.69	22%	69%	6%	4%
Ethnicity							
African American	4,857	60%	0.60	26%	60%	9%	5%
American Indian or Alaska Native	55	69%	0.69	25%	69%	4%	2%
Asian	981	76%	0.76	18%	76%	4%	2%
Hispanic or Latino	4,291	64%	0.64	25%	64%	7%	4%
Native Hawaiian or Pacific Islander	80	73%	0.73	21%	73%	4%	3%
White (non-Hispanic)	32,998	70%	0.70	22%	70%	5%	3%
Two or more races	2,650	67%	0.67	23%	67%	6%	4%
Migrant							
Migrant	246	69%	0.69	20%	69%	8%	4%
English Learner							
English Learner	4,121	63%	0.63	24%	63%	8%	5%
Economically Disadvantaged							
Economically Disadvantaged	29,333	65%	0.65	24%	65%	7%	4%
Students with Disabilities							
Students with Disabilities	8,504	60%	0.60	23%	60%	10%	7%



7

MA0320066\_3

In which set of models are both models shaded to represent  $\frac{4}{6}$  of a whole?

**A**



**B**



**C**



**D**





# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320066\*

Book Question Number: 7

Standard: KY.3.NF.3.a

Item Type: MC

Key: C

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	21,120	42%	0.42	27%	16%	42%	16%
Gender							
Female	10,372	41%	0.41	27%	16%	41%	16%
Male	10,747	42%	0.42	26%	16%	42%	15%
Ethnicity							
African American	2,273	28%	0.28	34%	19%	28%	18%
American Indian or Alaska Native	29	41%	0.41	34%	14%	41%	10%
Asian	498	56%	0.56	21%	12%	56%	11%
Hispanic or Latino	2,219	33%	0.33	31%	18%	33%	18%
Native Hawaiian or Pacific Islander	35	40%	0.40	31%	11%	40%	17%
White (non-Hispanic)	14,862	45%	0.45	25%	15%	45%	15%
Two or more races	1,202	40%	0.40	27%	17%	40%	16%
Migrant							
Migrant	129	29%	0.29	36%	13%	29%	21%
English Learner							
English Learner	2,320	31%	0.31	33%	18%	31%	18%
Economically Disadvantaged							
Economically Disadvantaged	13,675	36%	0.36	29%	17%	36%	17%
Students with Disabilities							
Students with Disabilities	4,542	33%	0.33	29%	18%	33%	20%

\* Calculator section

**8**

MA0320128\_3

When its weight is rounded to the nearest 100 pounds, a baby elephant weighs 300 pounds. When the weight is rounded to the nearest 10 pounds, the baby elephant weighs 250 pounds. How many pounds could the baby elephant weigh?

- A** 245
- B** 249
- C** 252
- D** 256





# Released Item Performance

## Kentucky Summative Assessments

Spring 2024

Grade 3

Mathematics

Item: MA0320128\*

Book Question Number: 8

Standard: KY.3.NBT.1

Item Type: MC

Key: C

Student Group	Number of Students	Percent Correct	Average Item Score	Item Breakout Statistics - Answer Choice Options			
				A (%)	B (%)	C (%)	D (%)
All Students	21,121	38%	0.38	20%	18%	38%	23%
Gender							
Female	10,372	37%	0.37	20%	18%	37%	24%
Male	10,748	39%	0.39	20%	18%	39%	23%
Ethnicity							
African American	2,274	30%	0.30	23%	22%	30%	25%
American Indian or Alaska Native	29	28%	0.28	38%	17%	28%	17%
Asian	498	49%	0.49	16%	16%	49%	19%
Hispanic or Latino	2,218	33%	0.33	21%	21%	33%	25%
Native Hawaiian or Pacific Islander	35	40%	0.40	23%	14%	40%	23%
White (non-Hispanic)	14,864	40%	0.40	20%	17%	40%	23%
Two or more races	1,201	36%	0.36	20%	18%	36%	26%
Migrant							
Migrant	129	30%	0.30	21%	26%	30%	23%
English Learner							
English Learner	2,319	31%	0.31	22%	22%	31%	26%
Economically Disadvantaged							
Economically Disadvantaged	13,675	34%	0.34	22%	19%	34%	25%
Students with Disabilities							
Students with Disabilities	4,542	33%	0.33	21%	20%	33%	26%

\* Calculator section



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