



THIRD SPACE
LEARNING

3rd Grade Maryland State Practice Math Test

Maryland Practice Test Grade
3

Grade 3

Questions

Name:

Class:

Date:

Score:

-
- 1 Emily has 8 boxes of chocolates. Each box contains 12 pieces of chocolate. Each piece of chocolate has 3 layers. Which equation shows the total number of chocolates?

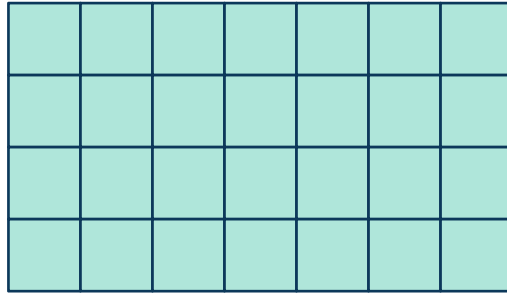
- A. 8×3
- B. 12×8
- C. 3×12
- D. $8 \times 12 \times 3$

-
- 2 The grocery store has 18 avocados. A new crate with 4 bags of 6 avocados just arrived. How many avocados does the grocery store have now?

Which equation can be used to solve?

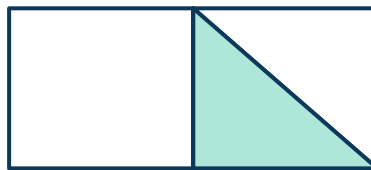
- A. $18 + 4 + 6 = a$
- B. $6 + 4 \times 18 = a$
- C. $(18 + 4) \times 6 = a$
- D. $4 \times 6 + 18 = a$

3 What is the area of the rectangle?



- A. 24 units
 - B. 24 square units
 - C. 28 units
 - D. 28 square units
-

4



Complete the sentence: The area of the shaded triangle is ____ of the area of the shape.

- A. $\frac{1}{2}$
- B. $\frac{1}{3}$
- C. $\frac{1}{4}$
- D. $\frac{1}{8}$

5 $8 \times 40 = n$

What is the value of n ?

A. 320

B. 120

C. 240

D. 32

6 What number makes the equations true?

$$6 \times \underline{\hspace{2cm}} = 42$$

$$42 \div 6 = \underline{\hspace{2cm}}$$

A. 6

B. 7

C. 8

D. 9

7 Which fraction is larger than $\frac{3}{4}$?

A. $\frac{4}{8}$

B. $\frac{4}{6}$

C. $\frac{2}{3}$

D. $\frac{5}{6}$

8

Cookies Sold

Friday	  
Saturday	    
Sunday	   

 = 6 cookies

How many more cookies were sold on Saturday than on Friday?

A. 15

B. $2\frac{1}{2}$

C. 6

D. $12\frac{1}{2}$

9

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Zane circles the products of 8 in red and the products of 4 in blue. Which statements about the products are true? Select all the correct answers.

- A. All products of 8 are also products of 4
- B. All products of 4 are also products of 8
- C. The products of 4 are always odd
- D. The products of 8 are always even
- E. Half a product of 8 is always a product of 4

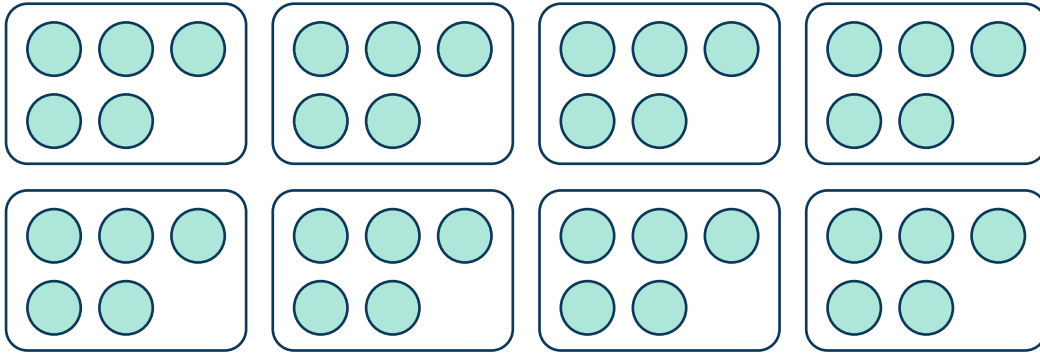
10



Which fraction is equivalent to the value of the point shown?

- A. $\frac{2}{3}$
- B. $\frac{6}{9}$
- C. $\frac{5}{8}$
- D. $\frac{5}{9}$

11



Which problems can be solved by using the model above?

Select all the correct answers.

- A. There are 8 books. Each book has 40 pages. How many pages does one book have?
- B. There are 8 packs of balloons. Each pack has 5 balloons. How many balloons are there in total?
- C. There are 40 ounces of chocolate syrup. Each milkshake has 5 ounces of chocolate syrup. How many milkshakes can be made?
- D. Malia scored 8 points and then 5 more points. How many points did she score in total?
- E. There are 8 rose bushes. Each rose bush has 40 roses. How many roses are there in total?

12

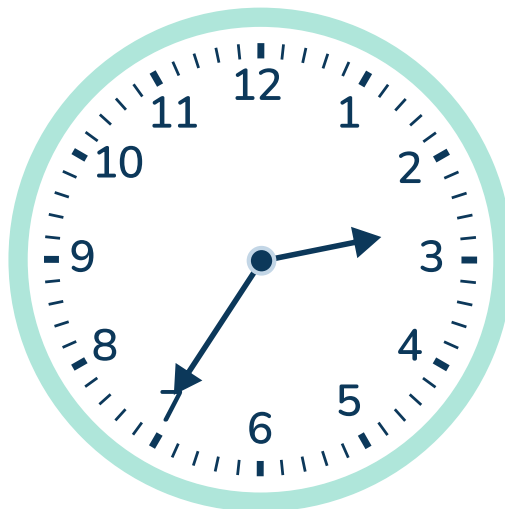
Liam has 4 rabbits. Each rabbit eats 2 ounces of pellets each day. Liam has 48 ounces of pellets. How many more days can Liam feed his rabbits with the pellets he has?

- A. 6 days
- B. 12 days
- C. 8 days
- D. 24 days

13 What is 6,829 rounded to the nearest hundred?

- A. 6,900
 - B. 6,830
 - C. 6,800
 - D. 7,000
-

14 What time is shown on the clock?



- A. 7:13
- B. 2:35
- C. 2:40
- D. 2:07

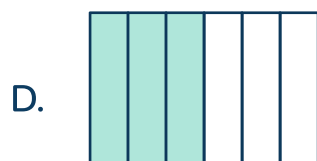
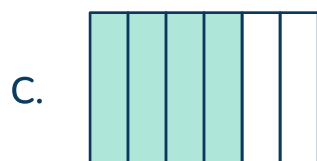
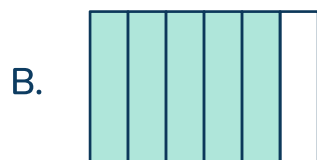
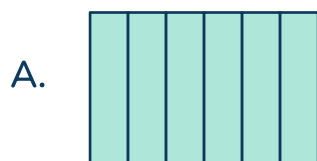
- 15 Which number line correctly shows the fraction $\frac{1}{5}$?



- 16 Which is the best estimate for the weight of a cat?

- A. 4 kilograms
- B. 40 grams
- C. 400 kilograms
- D. 400 grams

- 17 Which shape correctly completes the comparison?



-
- 18 Complete the sentence: A rectangle and a parallelogram both always have...

- A. ...equal sides.
- B. ...congruent angles.
- C. ...parallel sides.
- D. ...right angles.

- 19 Jake has 24 feet of ribbon. What are the possible dimensions for a rectangular frame that Jake can completely wrap the ribbon around? Select all the correct answers.

A. 7 feet by 5 feet
B. 4 feet by 8 feet
C. 12 feet by 2 feet
D. 6 feet by 6 feet
E. 6 feet by 4 feet

-
- 20 Which equation can help you solve $63 \div 7 = \triangle$?

A. $7 \times \triangle = 63$
B. $7 \div \triangle = 63$
C. $\triangle \div 7 = 63$
D. $\triangle \times 63 = 7$

21 Solve $583 - 296$.

- A. 313
- B. 297
- C. 293
- D. 287

22



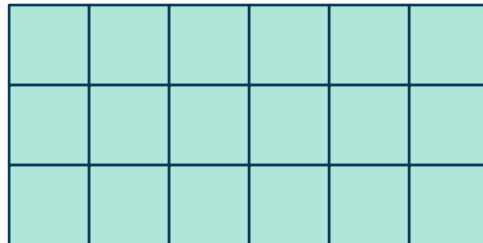
What is the missing value?

- A. 0
- B. $\frac{4}{4}$
- C. $\frac{1}{4}$
- D. $\frac{0}{4}$

- 23 A farmer has 60 apples. He wants to split them into 5 baskets. Each basket will have the same number of apples. Which equation can be used to find the number of apples in each basket?

A. $60 + 5 = ?$
B. $60 - 5 = ?$
C. $60 \div 5 = ?$
D. $60 \times 5 = ?$

-
- 24 The shape below is made of square units.

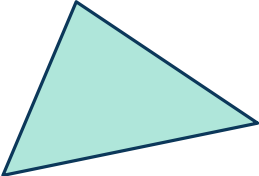
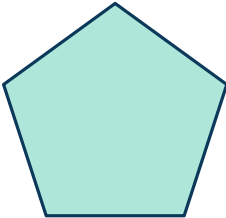
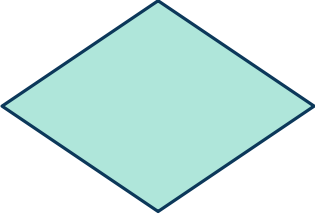


Which expressions can be used to find the area of the shape? Select all the correct answers.

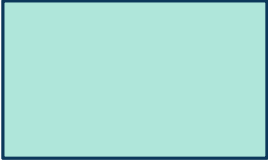
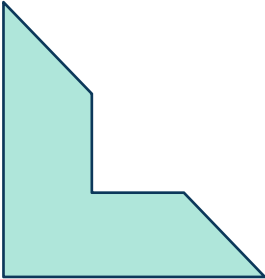
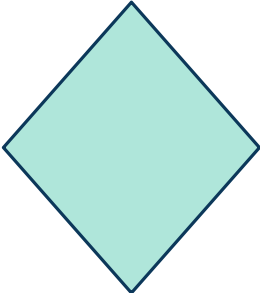
A. $6 + 6 + 6$
B. $3 + 6$
C. 3×6
D. $3 + 6 + 3 + 6$
E. $3 + 3 + 3 + 3 + 3 + 3$

25 Which group of shapes only has quadrilaterals?

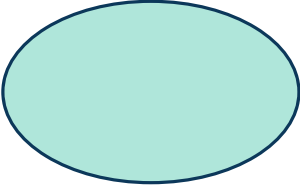
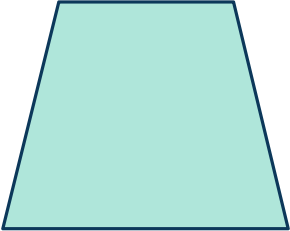
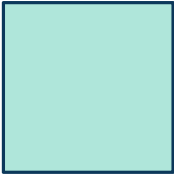
A.



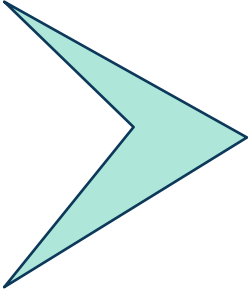
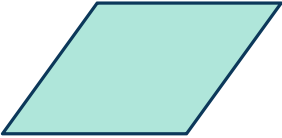
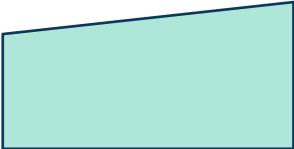
B.



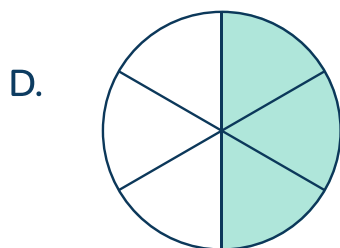
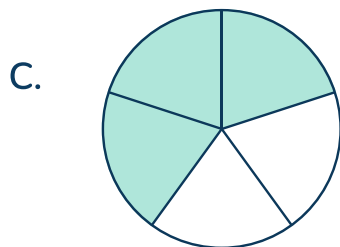
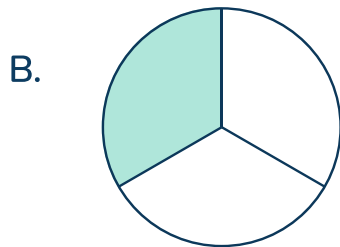
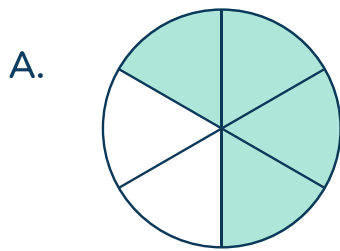
C.



D.



- 26 Which shapes shows a shaded amount equivalent to $\frac{1}{2}$?



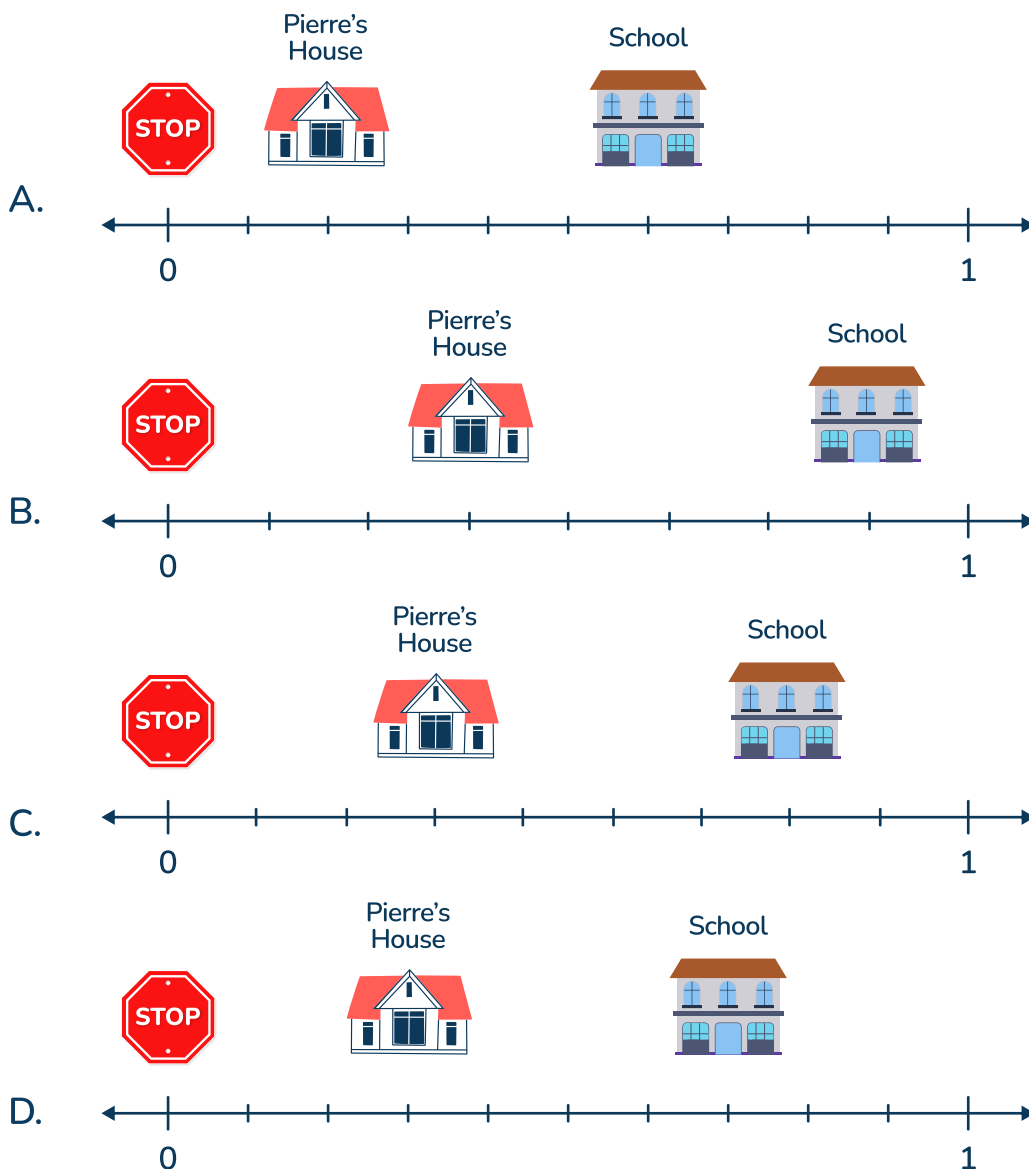
-
- 27 Evan is solving $? \div 8 = 3$. Which equation can help Evan solve?

- A. $3 \times 8 = ?$
- B. $3 \div ? = 8$
- C. $? \times 3 = 8$
- D. $3 \div 8 = ?$

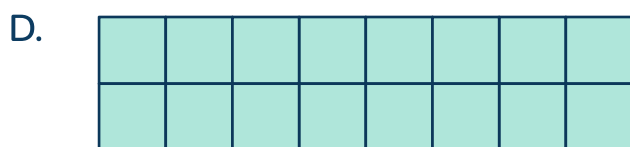
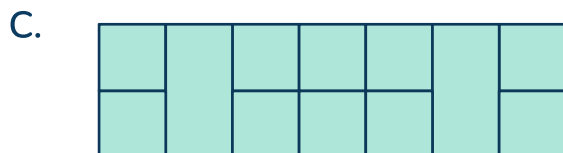
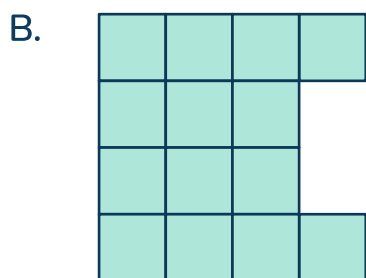
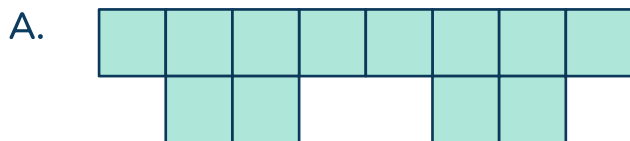
- 28 On Monday, a factory produced 46 toys. For the next 4 days, the factory plans to produce 18 toys each day. By the end of the week, how many total toys will the factory have produced?

A. 68 toys
 B. 118 toys
 C. 154 toys
 D. 202 toys

- 29 Pierre lives on a 1-mile street. Pierre lives $\frac{3}{10}$ of a mile from the stop sign. There is a school $\frac{7}{10}$ of a mile from the stop sign. Which number line correctly shows Pierre's house and the school?



30 Which shape has an area of 16 units?



31 Which equation is equivalent to 7×8 ? Select all the correct answers.

- A. $7 + (4 + 4)$
- B. $(5 \times 8) + (2 \times 8)$
- C. $3 \times 7 \times 8$
- D. $(7 + 4) \times (7 + 4)$
- E. $8 \times (5 + 2)$

- 32 A baker has 6 containers of flour. Each container has 15 grams of flour. How many grams of flour in total does the baker have?

A. 90 grams
B. 65 grams
C. 75 grams
D. 21 grams

33



Which fraction shows point Q?

A. $\frac{6}{5}$
B. $\frac{5}{6}$
C. $\frac{5}{4}$
D. $1\frac{1}{2}$

34 Jamal earned 315 points on Level 1 and 492 points on Level 2. He lost 87 points on Level 3. **About** how many points did Jamal have at the end of Level 3?

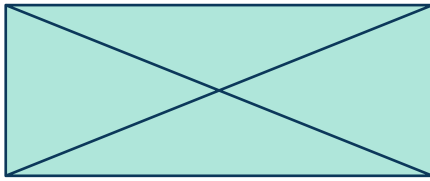
- A. 400 points
 - B. 500 points
 - C. 600 points
 - D. 700 points
-

35 Emma spends 35 minutes studying, then plays a game on her phone for 23 minutes. Afterward, she has a snack for 12 minutes. If she finishes her snack at 3:45 pm, what time did Emma start studying?

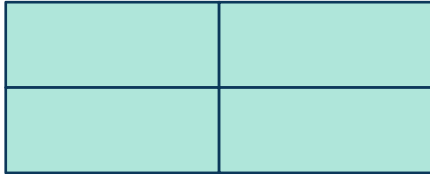
- A. 2:25 pm
- B. 4:55 pm
- C. 2:35 pm
- D. 4:45 pm

36 Which rectangle is divided into 4 equal parts?

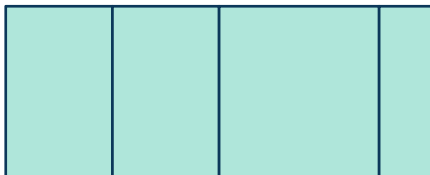
A.



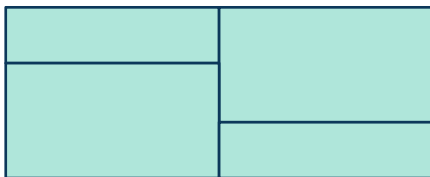
B.



C.



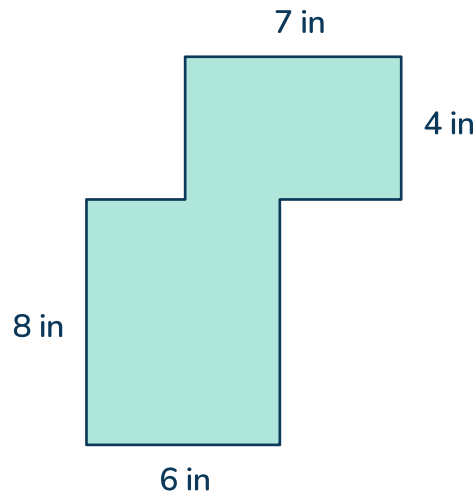
D.



37 Each box contains 6 oranges. There are 72 oranges in total. How many boxes are there?

- A. 12 boxes
- B. 78 boxes
- C. 9 boxes
- D. 15 boxes

- 38 Micah put two rectangles together to create the shape below.



What is the area, in square inches, of the shape that Micah created?

- A. 25 square inches
 - B. 56 square inches
 - C. 70 square inches
 - D. 76 square inches
-
- 39 How can you arrange 36 buttons in equal rows? Select all the correct answers.

- A. 3 rows of 8
- B. 12 rows of 3
- C. 30 rows of 6
- D. 6 rows of 6
- E. 4 rows of 9

40 Which context can be represented by $36 \div 4$?

- A. There were 36 books on the shelf. Then Wyatt borrowed 4 books.
- B. Wyatt had 4 stickers. Then he received 36 more stickers.
- C. Wyatt created 36 drawings. He made 4 times as many drawings as Lila did.
- D. Wyatt has 4 gift bags. He puts 36 party favors equally into the bags.

Standard: 3.OA.1, 3.OA.2, 3.OA.4

DOK 3

Short Answer Response - 2 points

- 41 Griffin is solving $\triangle \div 8 = 4$. He uses $8 \times 4 = \triangle$ to find the value of \triangle . Will this solving strategy work? Why or why not?

Standard: 3.MD.4, 3.NF.3

DOK 3

Short Answer Response - 2 points

- 42 Sanjay is growing 12 plants. Sanjay records the height of each plant (in feet):

$\frac{1}{2}, \frac{1}{4}, \frac{3}{4}, \frac{1}{4}, \frac{5}{8}, \frac{1}{2}, 1, \frac{5}{8}, \frac{1}{4}, \frac{1}{2}, \frac{5}{8}, \frac{5}{8}$

Graph the height of Sanjay's plants on the line plot below.

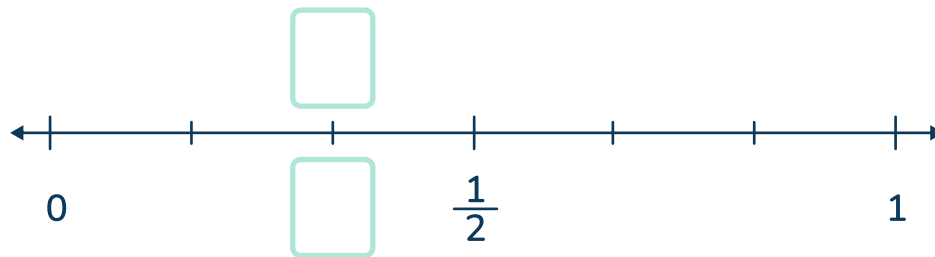


Standard: 3.NF.2, 3.NF.3

DOK 3

Extended Response - 4 points

- 43 **PART A:** Fill in the blanks with the two equivalent fractions shown on the number line.



PART B: Show where the fraction $\frac{4}{4}$ belongs on the number line. Explain how you know.

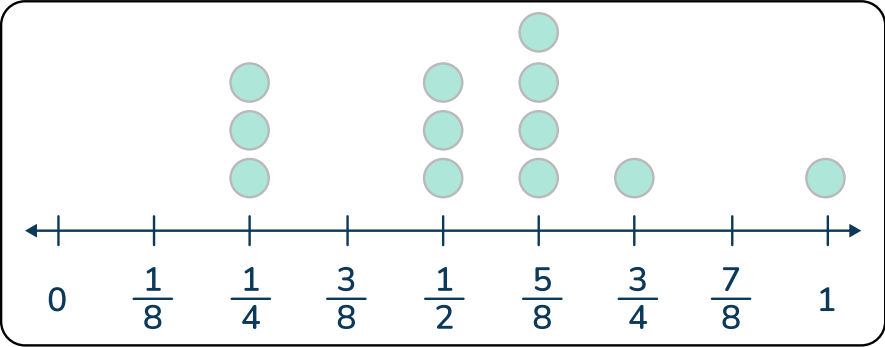
Answer Key - Multiple Choice

Item number	Correct answer	Standard(s)	DOK
1	B	3.OA.1	DOK 2
2	D	3.OA.8	DOK 2
3	D	3.MD.5, 3.MD.6	DOK 1
4	C	3.G.2, 3.NF.1	DOK 2
5	A	3.NBT.3	DOK 1
6	B	3.OA.4	DOK 1
7	D	3.NF.3d	DOK 1
8	A	3.MD.3	DOK 2
9	A, D, E	3.OA.9	DOK 2
10	C	3.NF.2, 3.NF.3	DOK 2
11	B, C	3.OA.3	DOK 2
12	A	3.OA.8	DOK 2
13	C	3.NBT.1	DOK 1
14	B	3.MD.1	DOK 1
15	A	3.NF.1, 3.NF.2a	DOK 1
16	A	3.MD.2	DOK 2
17	D	3.NF.3d	DOK 2
18	C	3.G.1	DOK 2
19	A, B, D	3.MD.8	DOK 2

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Item number	Correct answer	Standard(s)	DOK
20	A	3.OA.6	DOK 1
21	D	3.NBT.2	DOK 2
22	A	3.NF.3c	DOK 1
23	C	3.OA.2	DOK 1
24	A, C, E	3.MD.7, 3.OA.1	DOK 2
25	D	3.G.1	DOK 1
26	D	3.NF.3a, 3.NF.3b	DOK 1
27	A	3.OA.4	DOK 1
28	B	3.OA.8	DOK 2
29	D	3.NF.2	DOK 2
30	D	3.MD.5	DOK 1
31	B, E	3.OA.5	DOK 2
32	A	3.MD.2	DOK 1
33	C	3.NF.2	DOK 1
34	D	3.NBT.2, 3.OA.8	DOK 2
35	C	3.MD.1	DOK 2
36	B	3.G.2	DOK 1
37	A	3.OA.3	DOK 1
38	D	3.MD.7d	DOK 2
39	B, D, E	3.OA.1	DOK 1
40	C	3.OA.2	DOK 1

Item	KEY	Rationale
41	2 points	Student correctly identifies that Griffin's strategy will work and clearly explains the connection between the two equations.
	1 point	Student correctly identifies that Griffin's strategy will work but does not clearly explain the connection between the two equations.
	0 points	Student is incorrect or leaves the response blank.

Item	KEY	Rationale
42	2 points	<p>Student correctly creates a scale on the line plot and records each fraction.</p> 
	1 point	Student creates a scale on the line plot and records each fraction, making 1 or 2 mistakes.
	0 points	Student makes more than 2 mistakes or leaves the response blank.

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Item	KEY	Rationale
43	4 points	Student correctly identifies the missing fractions as $\frac{1}{3}$ and $\frac{2}{6}$ and $\frac{4}{4}$ as 1. Student clearly explains that 4 fourths is 4 out of 4 and equal to 1 whole.
	3 points	Student correctly identifies the missing fractions as $\frac{1}{3}$ and $\frac{2}{6}$ and $\frac{4}{4}$ as 1, but does not clearly explain why 44 is equal to 1 whole.
	2 points	Student correctly identifies 1 of the 2 the missing fractions as $\frac{1}{3}$ and $\frac{2}{6}$ and $\frac{4}{4}$ as 1. Student explains that 4 fourths is 4 out of 4 and equal to 1 whole.
	1 point	Student incorrectly identifies 2 out of the 3 fractions - the missing fractions or $\frac{4}{4}$.
	0 points	Student does not identify any of the fractions correctly or leaves the response blank.

ANSWERS SORTED BY CCSS STRAND

OA			
Item number	Correct answer	Standard(s)	DOK
1	B	3.OA.1	DOK 2
2	D	3.OA.8	DOK 2
6	B	3.OA.4	DOK 1
9	A, D, E	3.OA.3	DOK 2
11	B, C	3.OA.9	DOK 2
12	A	3.OA.8	DOK 2
20	A	3.OA.6	DOK 1
23	C	3.OA.2	DOK 1
27	A	3.OA.4	DOK 1
28	B	3.OA.8	DOK 2
31	B, E	3.OA.5	DOK 2
37	A	3.OA.3	DOK 1
39	B, D, E	3.OA.1	DOK 1
40	C	3.OA.2	DOK 1
41	Short Answer Response	3.OA.1, 3.OA.2, 3.OA.4	DOK 3

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NBT			
Item number	Correct answer	Standard(s)	DOK
5	A	3.NBT.3	DOK 1
13	C	3.NBT.1	DOK 1
21	D	3.NBT.2	DOK 2
34	D	3.NBT.2, 3.OA.8	DOK 2

NF			
Item number	Correct answer	Standard(s)	DOK
7	D	3.NF.3d	DOK 1
10	C	3.NF.2, 3.NF.3	DOK 2
15	A	3.NF.1, 3.NF.2a	DOK 1
17	D	3.NF.3d	DOK 1
22	A	3.NF.3c	DOK 1
26	D	3.NF.3a, 3.NF.3b	DOK 1
29	D	3.NF.2	DOK 2
33	C	3.NF.2	DOK 1
43	Short Answer Response	3.NF.2, 3.NF.3	DOK 3

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MD			
Item number	Correct answer	Standard(s)	DOK
3	D	3.MD.5, 3.MD.6	DOK 1
8	A	3.MD.3	DOK 2
14	B	3.MD.1	DOK 1
16	A	3.MD.2	DOK 2
19	A, B, D	3.MD.8	DOK 2
24	A, C, E	3.MD.7, 3.OA.1	DOK 2
30	D	3.MD.5	DOK 1
32	A	3.MD.2	DOK 1
35	C	3.MD.1	DOK 2
38	D	3.MD.7d	DOK 2
42	Short Answer Response	3.MD.4, 3.NF.4	DOK 3




G			
Item number	Correct answer	Standard(s)	DOK
4	C	3.G.2, 3.NF.1	DOK 2
18	C	3.G.1	DOK 2
25	D	3.G.1	DOK 1
36	B	3.G.2	DOK 1

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