THIRD SPACE LEARNING

3rd Grade Missouri State Practice Math Test

Missouri Practice Test Grade 3

Grade 3

Questions

Name: ..... Class: .....

Date: ..... Score: .....

1 A furniture store has 7 dining room tables. Each table has 4 legs. Each table comes with 6 chairs. Which equation shows the total number of chairs?

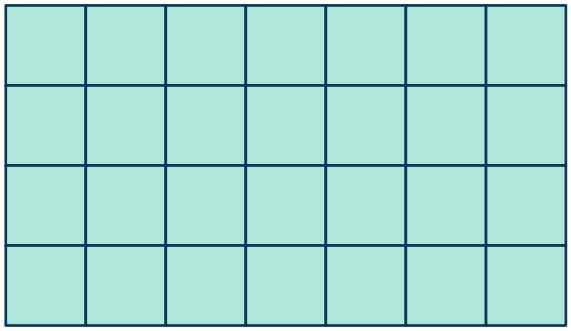
A. 7 x 4
B. 4 x 6
C. 6 x 7
D. 6 x 6

2 The grocery store has 27 avocados. A new crate with 5 bags of 7 avocados just arrived. How many avocados does the grocery store have now?

Which equation can be used to solve?

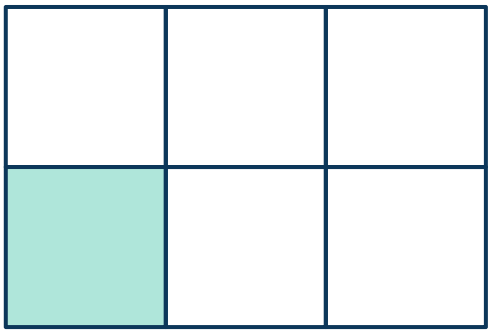
A. $27 + 5 + 7 = t$
B. $5 \times 7 + 27 = t$
C. $(27 + 5) \times 7 = t$
D. $7 + 5 \times 27 = t$

3 What is the area of the rectangle?



A. 28 units
B. 28 square units
C. 22 units
D. 22 square units

4



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

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

B. $\frac{1}{4}$

C. $\frac{1}{6}$

D. $\frac{1}{8}$

5 $7 \times 80 = a$

What is the value of a?

A. 560
B. 160
C. 420
D. 56

---

6 What number makes the equations true?

6 x _____ = 48

48 ÷ 6 = _____

A. 6
B. 8
C. 9
D. 7

7 Which fraction is larger than $\frac{1}{2}$?

A. $\frac{2}{4}$

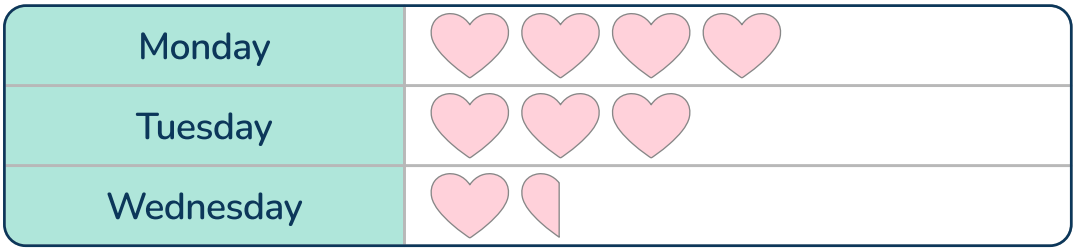
B. $\frac{4}{6}$

C. $\frac{1}{3}$

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

8

Animal Shelter Pet Adoptions



= 4 pet adoptions

How many more pet adoptions were there on Monday and Tuesday than on Wednesday?

A. 22

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

C. 8

D. 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

Luca circles the products of 6 in red and shades the products of 3 in green. Which statements about the products are true? Select **all** the correct answers.

A. The products of 6 are always even
B. The products of 3 are always odd
C. All products of 6 are also products of 3
D. All products of 3 are also products of 6
E. Half a product of 6 is always a product of 3

10

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

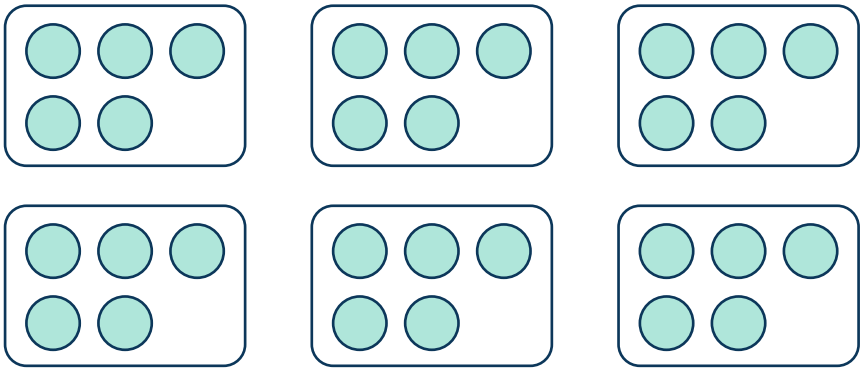
A. $\frac{1}{4}$

B. $\frac{3}{8}$

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

D. $\frac{1}{3}$

11



Which problems can be solved by using the model above? Select all the correct answers.

A. Kristen scored 5 points and then 6 more points. How many points did she score in total?
B. There are 5 chapters. Each chapter has 30 pages. How many pages does one chapter have?
C. There are 6 packs of crayons. Each pack has 5 crayons. How many crayons are there in total?
D. There are 6 trees. Each tree has 30 leaves. How many leaves are there in total?
E. There are 30 ounces of orange juice. Each smoothie has 5 ounces of orange juice. How many smoothies can be made?

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12 Violet has three kittens. Each kitten eats 2 ounces of food each day. Violet has 56 ounces of kitten food. How many more days can Violet feed her kittens with the food she has?

A. 6 days
B. 18 days
C. 9 days
D. 45 days

13 What is 4,097 rounded to the nearest hundred?

A. 4,010
B. 4,200
C. 4,000
D. 4,100

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14 What time is shown on the clock?

A. 12:04
B. 12:20
C. 1:20
D. 1:04

15 Which number line correctly shows the fraction $\frac{1}{6}$?

A.

B.

C.

D.

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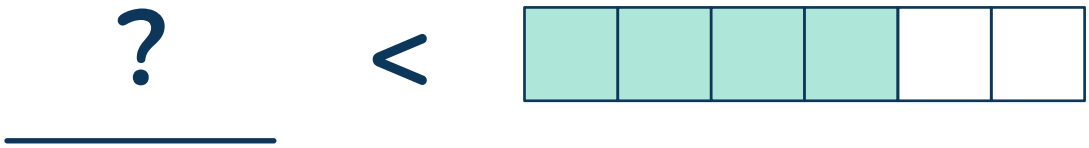
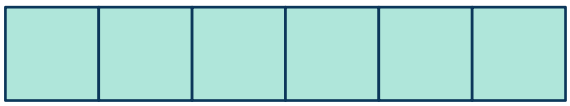
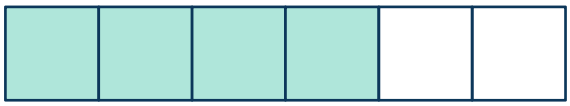
16 Which is the best estimate for the weight of a pineapple?

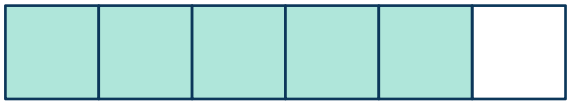
A. 150 grams
B. 1 kilogram
C. 1 gram
D. 150 kilograms

17 Which shape correctly completes the comparison?



A. 

B. 

C. 

D. 

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18 Complete the sentence: A quadrilateral and square both always have...

A. ...parallel sides.
B. ...equal sides.
C. ...right angles.
D. ...four sides.

19 Penelope has 24 meters of fence. What are the possible dimensions for a rectangular garden that Penelope can completely fence in? Select **all** the correct answers.

A. 4 meters by 8 meters
B. 12 meters by 2 meters
C. 6 meters by 6 meters
D. 5 meters by 4 meters
E. 3 meters by 8 meters

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20 Which equation can help you solve $32 \div 8 = \triangle$?

A. $\triangle \div 8 = 32$
B. $8 \times \triangle = 32$
C. $\triangle \times 32 = 8$
D. $8 \div \triangle = 32$

21 Solve 682 - 498.

A. 184
B. 216
C. 284
D. 224

22 

What is the missing value?

A. 0
B. $\frac{4}{4}$
C. $\frac{1}{4}$
D. $\frac{3}{4}$

23 A bakery has 36 croissants. They will be placed into 6 separate boxes. Each box has the same amount of croissants. Which equation can be used to find the number of croissants in each box?

A. 36 x 6 = ?
B. 36 - 6 = ?
C. 36 + 6 = ?
D. 36 ÷ 6 = ?

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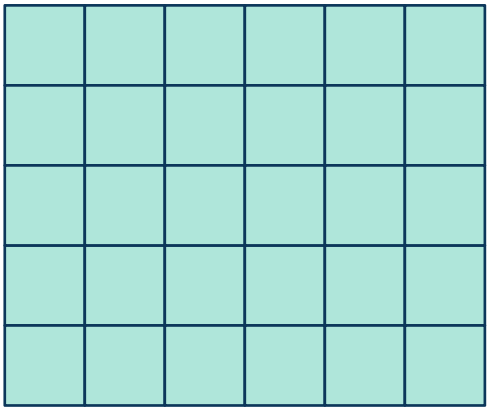
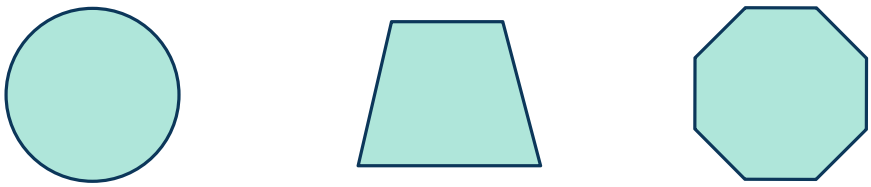
24 The shape below is made of square units.

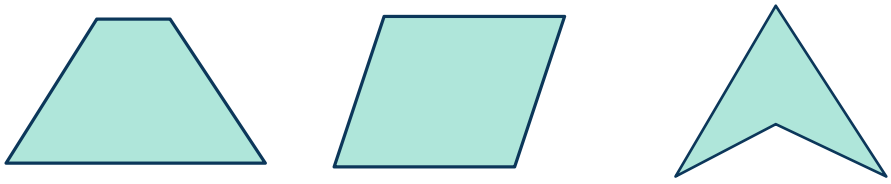


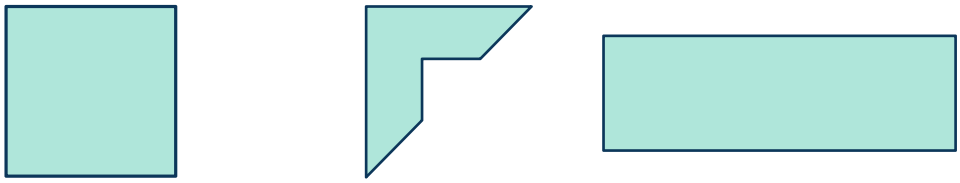
Which expressions can be used to find the area of the shape?
Select all the correct answers.

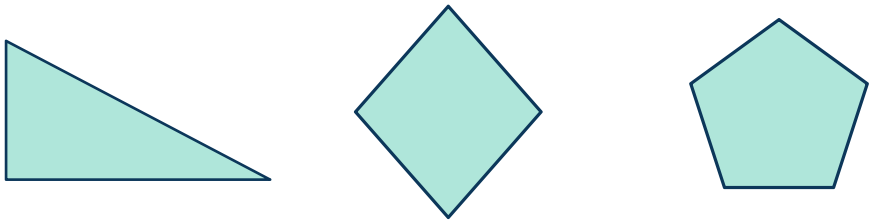
A. 6 + 6 + 6 + 6 + 6
B. 5 + 6
C. 5 + 6 + 5 + 6
D. 5 x 6
E. 5 + 5 + 5 + 5 + 5 + 5

25 Which group of shapes only has quadrilaterals?

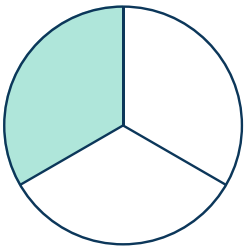
A. 

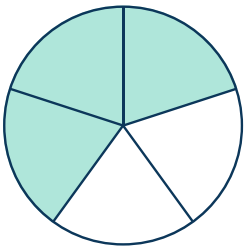
B. 

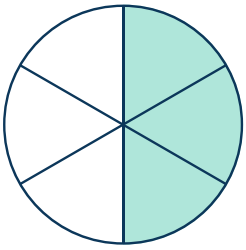
C. 

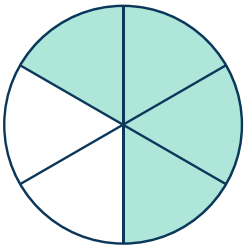
D. 

26 Which shapes show a shaded amount equivalent to $\frac{2}{3}$?

A. 

B. 

C. 

D. 

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27 Tim is solving ? ÷ 5 = 7. Which equation can help Tim solve?

A. 7 ÷ ? = 5
B. 7 x 5 = ?
C. ? x 7 = 5
D. 7 ÷ 5 = ?

28 On Friday, Noah read 21 pages in his book. For the next 4 days, Noah will read 15 pages each day. At the end of the week, how many pages will Noah have read in total?

A. 40 pages
B. 60 pages
C. 81 pages
D. 74 pages

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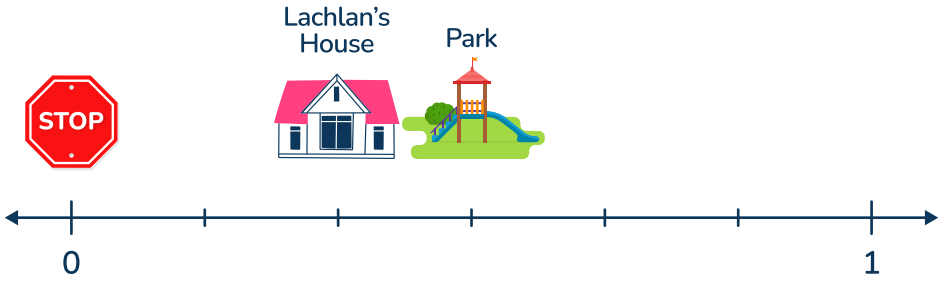
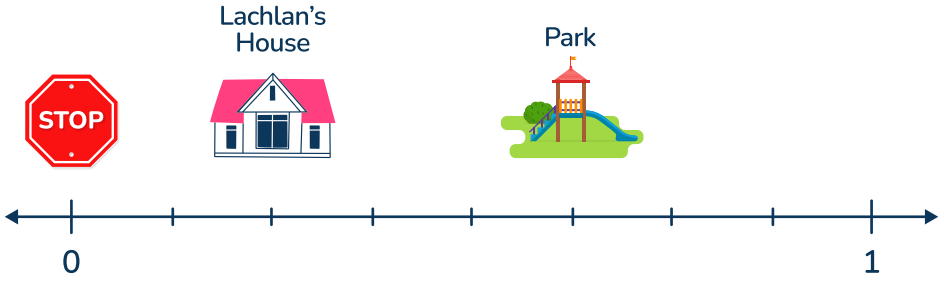
29 Lachlan lives on a 1 mile street. Lachlan lives $\frac{2}{6}$ of a mile from the stop sign. There is a park $\frac{1}{2}$ of a mile from the stop sign. Which number line correctly shows Lachlan's house and the park?

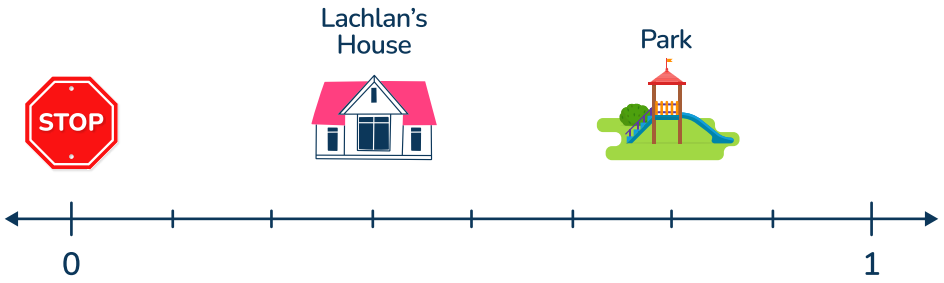
A.



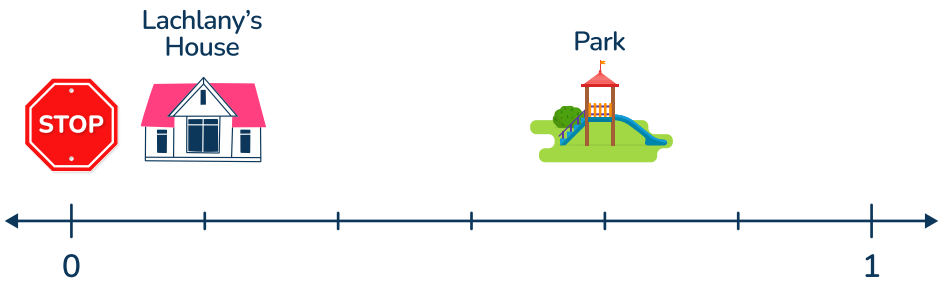
B.



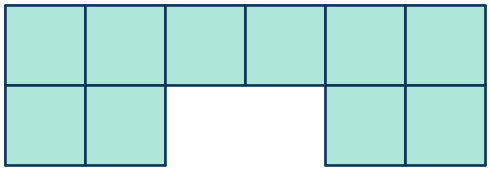
C.

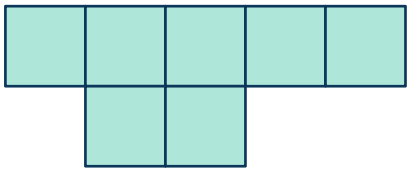


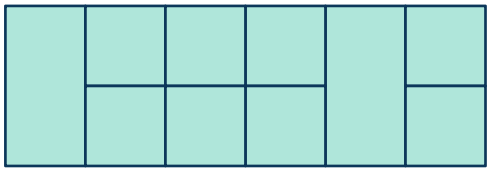
D.



30 Which shape has an area of 10 units?

A. 

B. 

C. 

D. 

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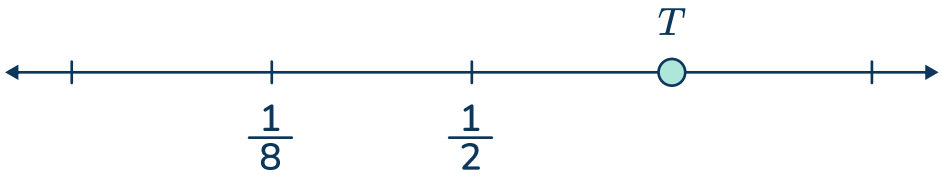
31 Which equation is equivalent to 7 x 7? Select **all** the correct answers.

A. 7 + (3 + 4)
B. 3 x 4 x 7
C. (2 x 7) + (5 x 7)
D. 7 x (6 + 1)
E. (7 + 2) x (7 + 5)

32 Barron has 7 containers of birdseed. Each container has 14 grams of birdseed. How many grams of birdseed in total does Barron have?

A. 21 grams
B. 98 grams
C. 88 grams
D. 36 grams

33



Which fraction shows point T?

A. $\frac{2}{3}$
B. $\frac{3}{8}$
C. $\frac{7}{8}$
D. $\frac{3}{4}$

34 Markeeta earned 342 points on Level 1 and 281 points on Level 2. She lost 133 points on Level 3. **About** how many points did Markeeta have at the end of Level 3?

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

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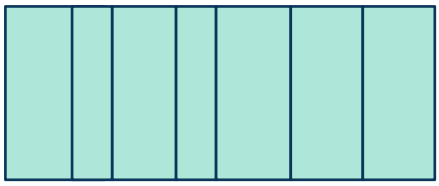
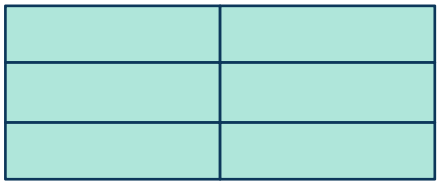
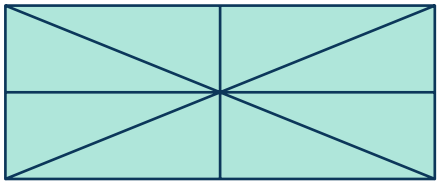
35 Rosie reads for 33 minutes and then plays her guitar for 25 minutes. Then she eats dinner for 21 minutes. If he finishes dinner at 7:03pm, what time did Rosie start reading?

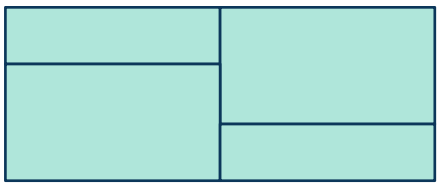
A. 5:44 pm
B. 8:21 pm
C. 6:03 pm
D. 7:38 pm

36 Which rectangle is divided into 8 equal parts?

A. 

B. 

C. 

D. 

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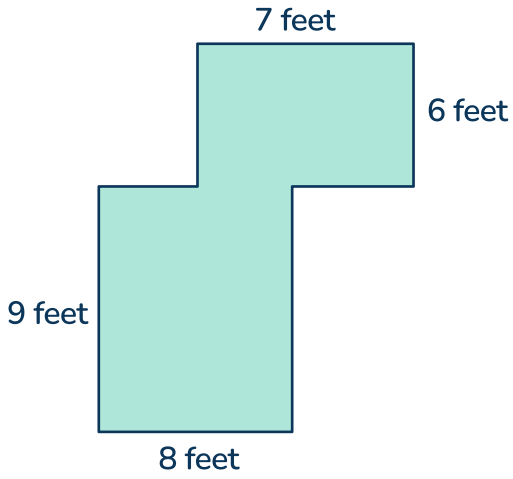
37 Each bag has 6 cookies. There are 78 cookies in all. How many bags are there?

A. 72 bags
B. 84 bags
C. 7 bags
D. 13 bags

38 Annaleigh put two rectangles together to create the shape below.



What is the area, in square feet, of the shape that Annaleigh created?

A. 114 square feet
B. 30 square feet
C. 42 square feet
D. 72 square feet

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39 How can you arrange 32 buttons in equal rows? Select **all** the correct answers.

A. 4 rows of 8
B. 12 rows of 2
C. 20 rows of 4
D. 6 rows of 8
E. 2 rows of 16

40 Which context can be represented by 48 ÷ 6?

A. There were 48 cookies. Then Ryan ate 6 cookies.
B. There were 6 cookies and Ryan made 48 more.
C. Ryan has 6 bags. He puts 48 cookies equally into the bags.
D. Ryan made 48 cookies. He made 6 times as many cookies as Chris.

Standard: 3.OA.1, 3.OA.2, 3.OA.4
DOK 3
Short Answer Response - 2 points

41 Abby is solving △ ÷ 9 = 7. She uses 9 x 7 = to find the value of △. Will this solving strategy work? Why or why not?

_____

_____

_____

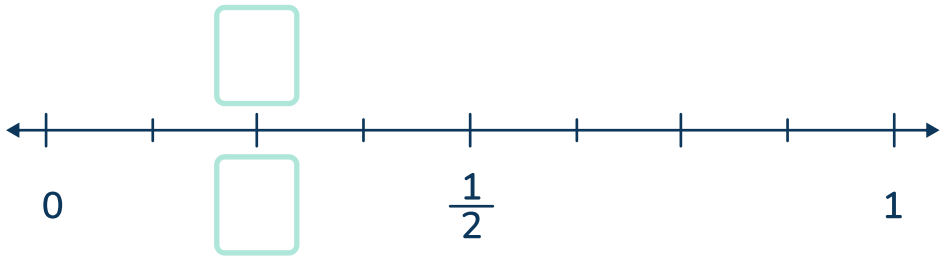
Standard: 3.MD.4, 3.NF.3
DOK 3
Short Answer Response - 2 points

42 Stassi is growing 8 plants. Stassi records the height of each plant (in feet): $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{3}{4}$, $\frac{2}{4}$, $1\frac{1}{4}$, $1\frac{2}{8}$.

Graph the height of Stassi'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 $\frac{3}{3}$ belongs on the number line. Explain how you solved.

_____

_____

Answer Key - Multiple Choice

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

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

Item number	Correct answer	Standard(s)	DOK
42	Short Answer Response	**3.MD.4, 3.NF.4**	DOK 3
43	Short Answer Response	**3.NF.2, 3.NF.3**	DOK 3

Item	KEY	Rationale
41	2 points	Student correctly identifies that Abby's strategy will work and clearly explains the connection between the two equations.
	1 point	Student correctly identifies that Abby'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	Student correctly creates a scale on the line plot and records each fraction.
	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.

Item	KEY	Rationale
43	4 points	Student correctly identifies the missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{3}{3}$ as 1. Student clearly explains that 3 thirds is 3 out of 3 and equal to 1 whole.
	3 points	Student correctly identifies the missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{3}{3}$ as 1, but does not clearly explain why $\frac{3}{3}$ is equal to 1 whole.
	2 points	Student correctly identifies 1 of the 2 the missing fractions as $\frac{1}{4}$ and $\frac{2}{8}$ or equivalent and $\frac{3}{3}$ as 1. Student does not explain that 3 thirds is 3 out of 3 and equal to 1 whole.
	1 point	Student incorrectly identifies 2 out of the 3 fractions - the missing fractions or $\frac{3}{3}$.
	0 points	Student does not identify any of the fractions correctly or leaves the response blank.

ANSWERS SORTED BY CCSS STRAND

OA			
1	C	**3.OA.1**	DOK 2
2	B	**3.OA.8**	DOK 2
6	B	**3.OA.4**	DOK 1
9	A, C, E	**3.OA.3**	DOK 2
11	C, E	**3.OA.9**	DOK 2
12	C	**3.OA.8**	DOK 2
20	B	**3.OA.6**	DOK 1
23	D	**3.OA.2**	DOK 1
27	B	**3.OA.4**	DOK 1
28	C	**3.OA.8**	DOK 2
31	C, D	**3.OA.5**	DOK 2
37	D	**3.OA.3**	DOK 1
39	A, E	**3.OA.1**	DOK 1
40	C, D	**3.OA.2**	DOK 1
41	Short Answer Response	**3.OA.1, 3.OA.2, 3.OA.4**	DOK 3

NBT			
5	A	**3.NBT.3**	DOK 1
13	D	**3.NBT.1**	DOK 1
21	A	**3.NBT.2**	DOK 2
34	B	**3.NBT.2, 3.OA.8**	DOK 2

NF			
7	B	**3.NF.3d**	DOK 1
10	D	**3.NF.2, 3.NF.3**	DOK 2
15	C	**3.NF.1, 3.NF.2a**	DOK 1
17	D	**3.NF.3d**	DOK 1
22	B	**3.NF.3c**	DOK 1
26	D	**3.NF.3a, 3.NF.3b**	DOK 1
29	A	**3.NF.2**	DOK 2
33	C	**3.NF.2**	DOK 1
43	Short Answer Response	**3.NF.2, 3.NF.3**	DOK 3

MD			
3	B	**3.MD.5, 3.MD.6**	DOK 1
8	A	**3.MD.3**	DOK 2
14	D	**3.MD.1**	DOK 1
16	B	**3.MD.2**	DOK 2
19	A, C	**3.MD.8**	DOK 2
24	A, D, E	**3.MD.7, 3.OA.1**	DOK 2
30	A	**3.MD.5**	DOK 1
32	B	**3.MD.2**	DOK 1
35	A	**3.MD.1**	DOK 2
38	A	**3.MD.7d**	DOK 2
42	Short Answer Response	**3.MD.4, 3.NF.4**	DOK 3

G			
4	C	**3.G.2, 3.NF.1**	DOK 1
18	D	**3.G.1**	DOK 2
25	B	**3.G.1**	DOK 1
36	C	**3.G.2**	DOK 1

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