THIRD SPACE LEARNING

5th Grade Washington State Practice Math Test

Washington Practice Test
Grade 5

Grade 5

Questions

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

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

The table below lists the prices of some of the top selling fruits at the grocery store.

Item	Size	Price
Bananas	1 bunch	$0.72
Blueberries	10 oz container	$3.99
Strawberries	16 oz container	$4.89
Avocado	1 avocado	$1.29
Watermelon	1 watermelon	$9.87
Oranges	4 lb bag	$5.75

1 How much would it cost to buy 4 avocados and 2 bags of oranges?

A. $15.37
B. $25.58
C. $16.66
D. $14.08

2 What fraction of a meter is 5 centimeters?

A. $\frac{1}{5}$

B. $\frac{1}{20}$

C. $\frac{1}{50}$

D. $\frac{1}{100}$

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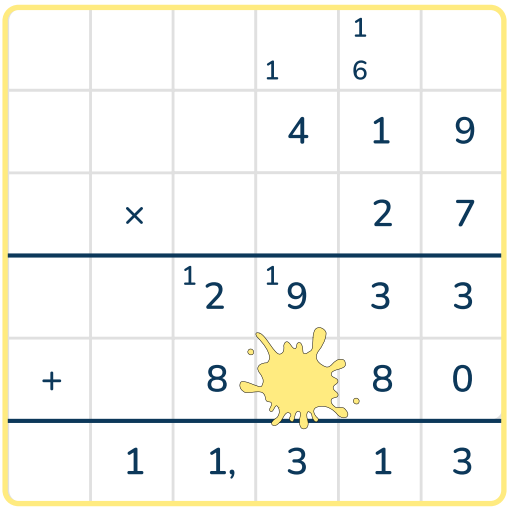
3 A certain fraction is greater than 1 and less than 2. When that fraction is multiplied by 2, which point(s) on the number line could be the answer? Select all the correct answers.

A. Point U
B. Point V
C. Point W
D. Point X
E. Point Y

4 Nova found the product of 419 and 27. Her work is shown below. Her teacher was unable to read one of the numbers in her work.



			1	1 6	
			4	1	9
	×			2	7
		1 2	1 9	3	3
+		8	[illegible]	8	0
	1	1,	3	1	3

What number belongs in the box where the number the teacher can't read is?

A. 0
B. 1
C. 2
D. 3

---

5 Which expression shows '6 more than the product of 5 and 7'?

A. $6 + 5 \div 7$
B. $\frac{5}{7} + 6$
C. $5 \times 7 + 6$
D. $6 - (5 + 7)$

6 Rudy built a new garden bed in his backyard. He needs to fill it with $12\frac{1}{3}$ cubic yards of soil. He has already poured in $7\frac{7}{12}$ cubic yards of soil. How much more soil does he need to pour in to fill the garden bed? Answer in lowest terms.

A. $19\frac{11}{12}$ cubic yards

B. $4\frac{3}{4}$ cubic yards

C. $4\frac{7}{12}$ cubic yards

D. $3\frac{1}{6}$ cubic yards

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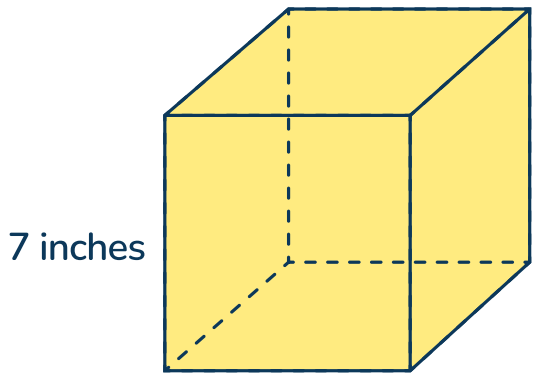
7 Which expression represents the volume, in cubic inches, of this cube?



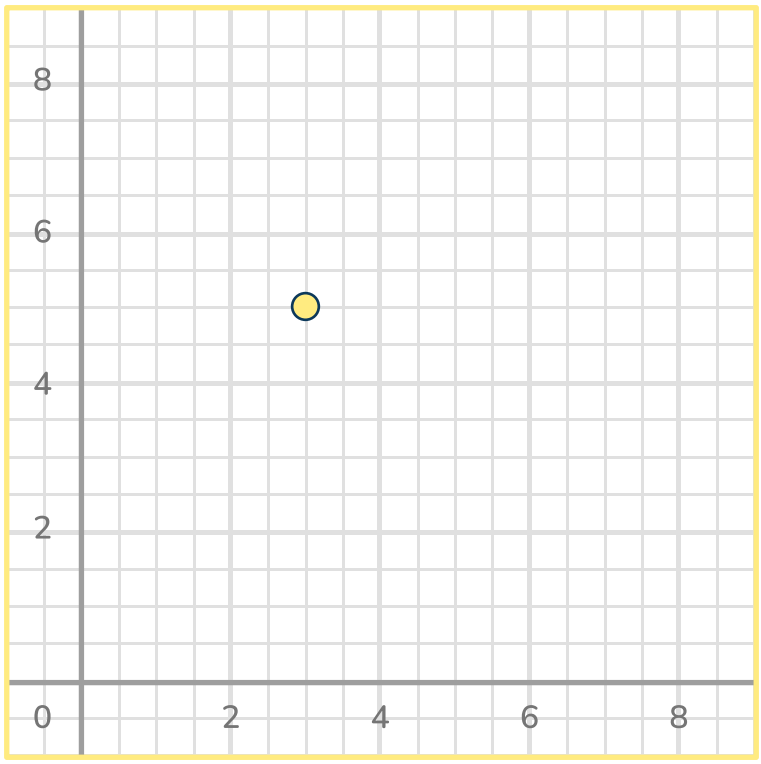
A. 7×6

B. $7 \times 7 \times 7$

C. $6 \times (7 + 7 + 7 + 7)$

D. $7 + 7 + 7 + 7 + 7 + 7$

8



What are the coordinates of the point shown?

A. (5, 3)
B. (3, 3)
C. (5, 5)
D. (3, 5)

---

9 Nadia has been measuring a plant for a science project. The plant has grown $\frac{1}{5}$ of an inch each week and has grown a total of 2 inches taller. How many weeks has Nadia been measuring this plant?

A. 10 weeks

B. $\frac{1}{10}$ of a week

C. 2 weeks

D. 5 weeks

10 Yazlene and her 3 friends go out to eat at a restaurant. At the end of the meal, the total bill is $83.52. They decide to split the bill equally. How much will each friend pay?

A. $250.56
B. $27.84
C. $20.88
D. $217.08

---

11 Use the correct order of operations to solve the expression below:

$$5 + 4 \times 6 - 45 + 9$$

A. 7
B. -7
C. 19
D. 12

12 The table below shows the time it took four runners to complete a mile.

Runner	Time (minutes)
1	7.54
2	8.141
3	8.42
4	7.8

Which comparison of these times is NOT correct?

A. $7.54 < 8.42$
B. $7.8 > 7.54$
C. $7.8 < 8.42$
D. $8.141 > 8.42$

---

13 Brett wrote down two patterns.

Pattern A: 0, 12, 24, 36, 48, 60...
Pattern B: 0, 3, 6, 9, 12, 15...

Which statement correctly compares Brett's patterns?

A. The numbers in both patterns start odd, then become even.
B. The numbers in both patterns alternate between odd and even.
C. The numbers in Pattern A are 4 times the numbers in Pattern B.
D. The numbers in Pattern B are 9 less than the numbers in Pattern A.

14 Three pizzas are shared equally between 4 people. What fraction of pizza will each person get?

A. $\frac{3}{4}$

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

C. $\frac{4}{3}$

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

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15 What number is two hundred nineteen and seventy six thousandths?

A. 219,076
B. 2,019.76
C. 219.076
D. 219.76

16

Which name(s) can this shape be classified with? Select all the correct answers.

A. Rhombus
B. Rectangle
C. Square
D. Parallelogram
E. Quadrilateral

---

17 What is the correct way to write 423.098 in expanded form?

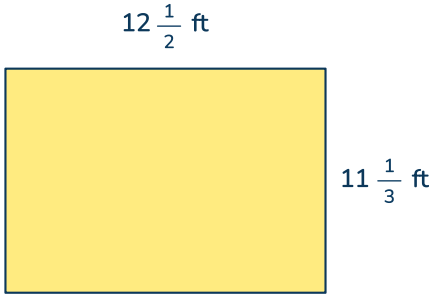
A. $4 \times 100 + 3 \times 1 + 9 \times (\frac{1}{100}) + 8 \times (\frac{1}{1{,}000})$

B. $4 \times 100 + 2 \times 10 + 3 \times 1 + 9 \times (\frac{1}{100})$

C. $4 \times 100 + 2 \times 10 + 3 \times 1 + 9 \times (\frac{1}{10}) + 8 \times (\frac{1}{100})$

D. $4 \times 100 + 2 \times 10 + 3 \times 1 + 9 \times (\frac{1}{100}) + 8 \times (\frac{1}{1{,}000})$

18 Trixie is getting new carpet installed in her living room. The diagram below shows the dimensions of her living room floor. If the carpet covers the entire floor, what is the area of the carpet?



A. $137\frac{2}{3}$ square feet

B. $141\frac{2}{3}$ square feet

C. $121\frac{1}{3}$ square feet

D. $101\frac{2}{3}$ square feet

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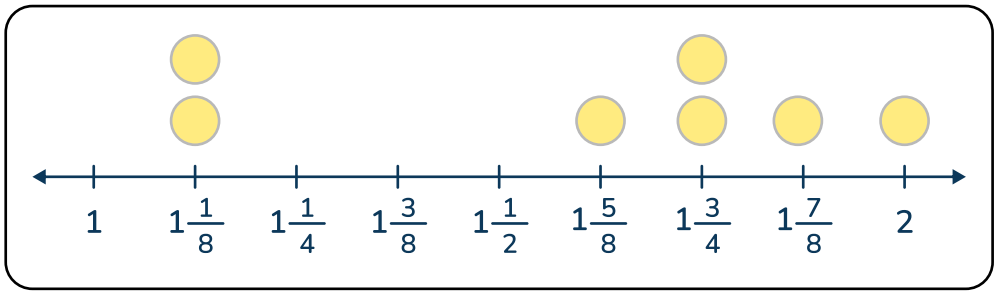
19 The line plot below shows the heights of Sasha's bean plants in inches. What is the total height, in inches, of the 3 tallest plants?



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

B. $5\frac{3}{8}$ inches

C. $5\frac{5}{8}$ inches

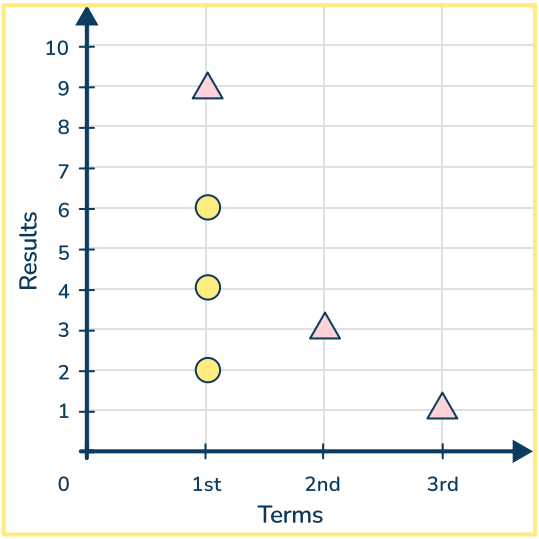
D. $3\frac{7}{8}$ inches

20 The rules for two patterns are below.

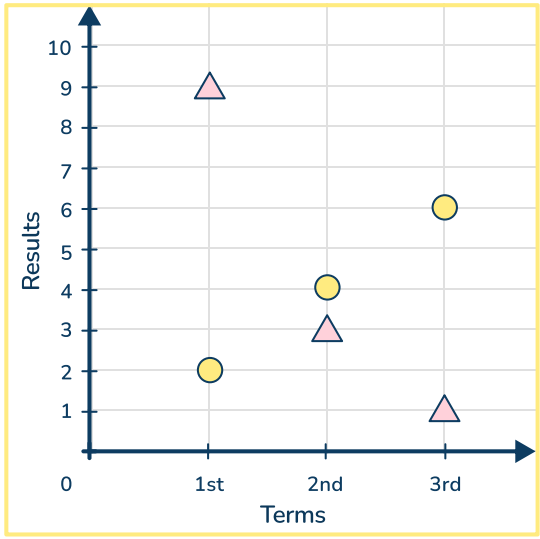
- Pattern A: Start at 2. Add 2.
- Pattern B: Start at 9. Multiply by $\frac{1}{3}$.

In the graphs, the circles represent Pattern A and the triangles represent Pattern B. Which graph is correct?

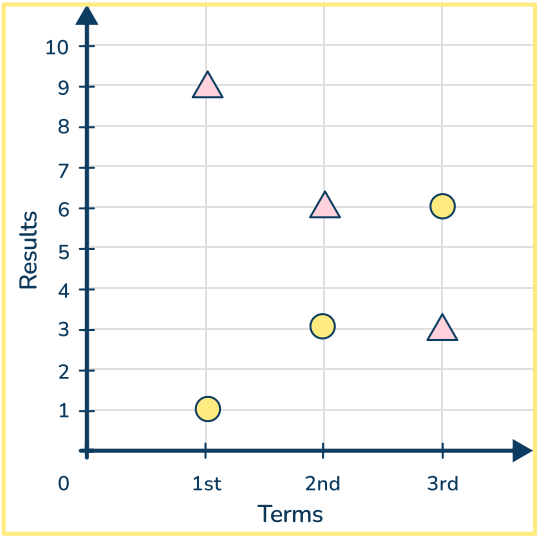
A.



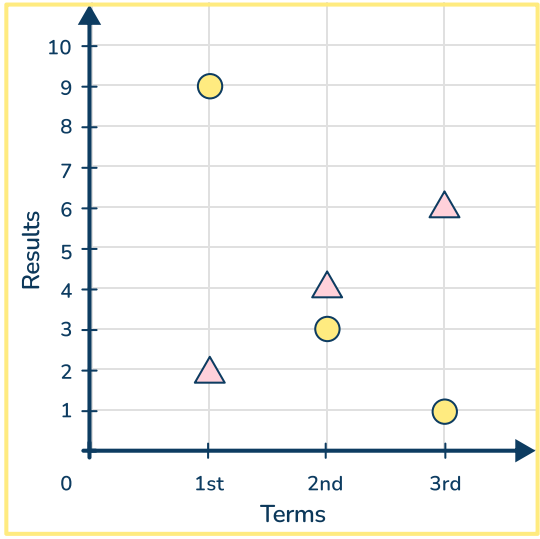
B.



C.



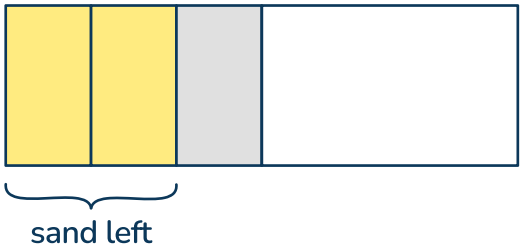
D.



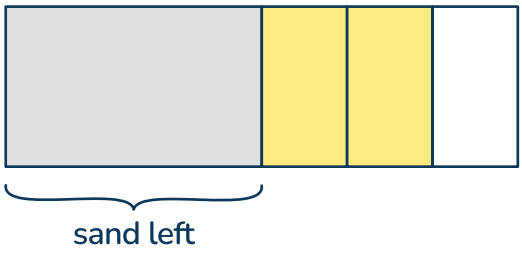
21 Viola was completing a history project. She had $\frac{2}{3}$ of a pound of sand. She uses $\frac{1}{2}$ of the sand. To find how much of a pound of sand she has left, Viola draws a model that represents 1 pound of sand.

Choose the model that shows the correct way Viola should solve this problem.

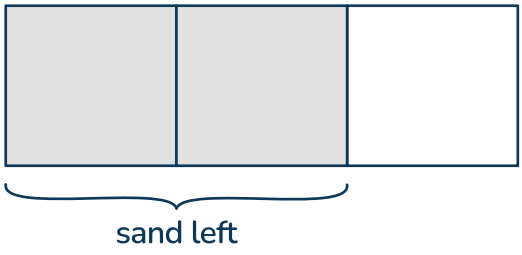
A.



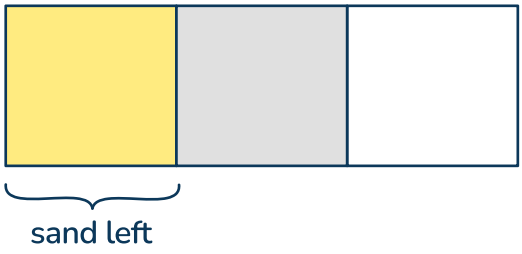
B



C.



D.



22 Round 41,792.297 to the nearest hundredth.

A. 41,792.298
B. 41,792.30
C. 41,792.29
D. 41,800.00

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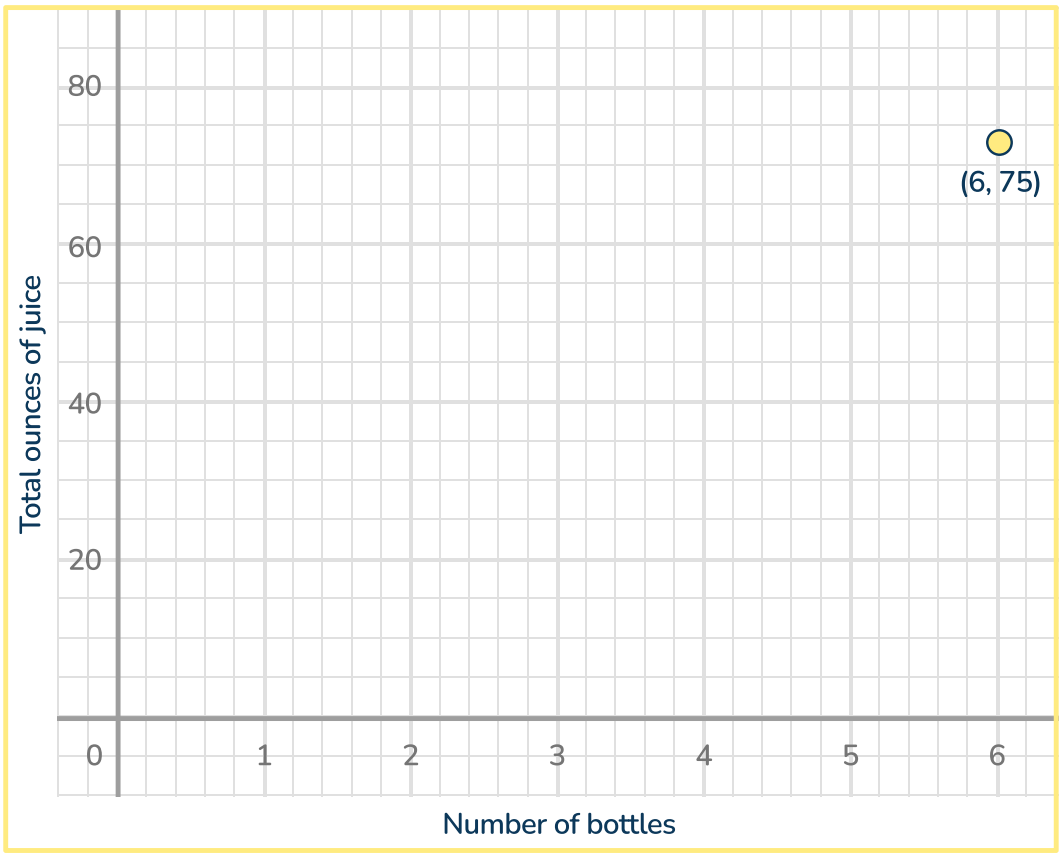
23 The graph shows the total number of ounces in any number of bottles of juice.



Which statement correctly explains the meaning of (6, 75) on the graph?

A. Each bottle of juice is 15 ounces.
B. 75 bottles of juice have 6 total ounces.
C. There are 70 ounces in 6 bottles of juice.
D. 6 bottles of juice contain 75 ounces.

24 Solve the following equation.

$$5(9 \times 11 - 7) + 3 \div 3 + 1$$

A. 163.6
B. 364
C. 462
D. 445.7

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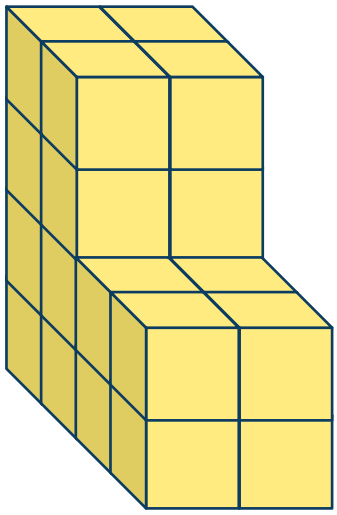
25 The composite shape below is made up of unit cubes. What is the volume, in cubic units, of the composite shape?



A. 14
B. 24
C. 28
D. 22

26 Casey's orchard has 654 pears ready to sell. The pears will be put in boxes of 19 and sold for $9.00 per box. How many full boxes of pears can Casey make?

A. 34 boxes
B. 72 boxes
C. 77 boxes
D. 35 boxes

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27 Chanel volunteers at an animal shelter. She helps feed the animals based on the following rules.

- A guinea pig eats $\frac{2}{3}$ the amount of food as a cat.
- A dog eats $\frac{3}{2}$ the amount of food as a cat.

Based on the information above, which statement is true?

A. A cat and a dog eat the same amount of food.
B. A cat eats more than a dog.
C. A dog eats less than a guinea pig.
D. A cat eats less than a dog.

28 Which shapes always have 4 right angles? Select all the correct answers.

A. Square
B. Parallelogram
C. Rhombus
D. Rectangle
E. Quadrilateral

---

29 Vincent spent $3\frac{3}{4}$ hours practicing the trumpet. How many minutes did Vincent spend practicing the trumpet?

A. 225 minutes
B. 165 minutes
C. 195 minutes
D. 135 minutes

30 Which equation equals 5,000?

A. $500 \times 10^3 =$

B. $5 \times 10^3 = ?$

C. $50 \div 10^2 = ?$

D. $5{,}000 \div 10^3 = ?$

31 A fruit salad recipe requires $2\frac{1}{4}$ cups raspberries. How many cups of raspberries would be needed to make $4\frac{1}{3}$ fruit salad recipes?

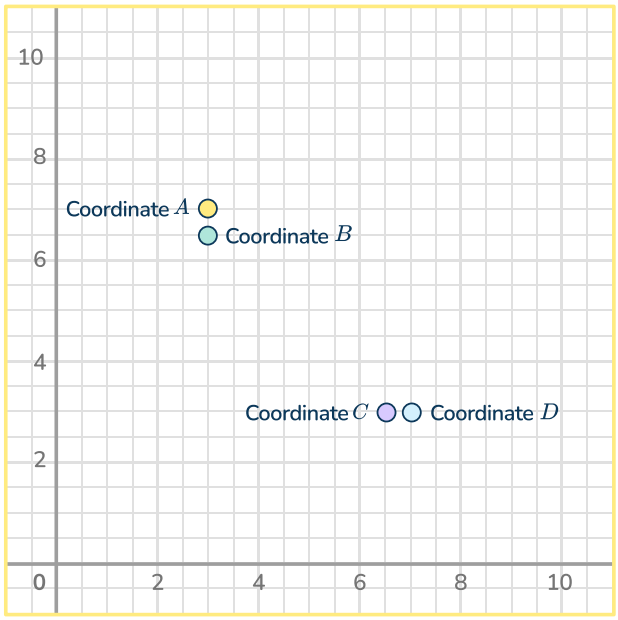
A. $6\frac{3}{4}$ cups

B. $8\frac{1}{4}$ cups

C. $9\frac{3}{4}$ cups

D. $10\frac{1}{3}$ cups

32 Which point shows (7, 3)?



A. Coordinate A
B. Coordinate B
C. Coordinate C
D. Coordinate D

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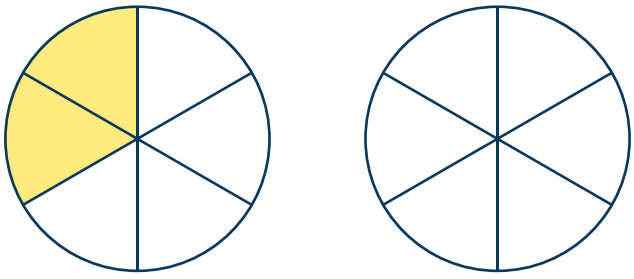
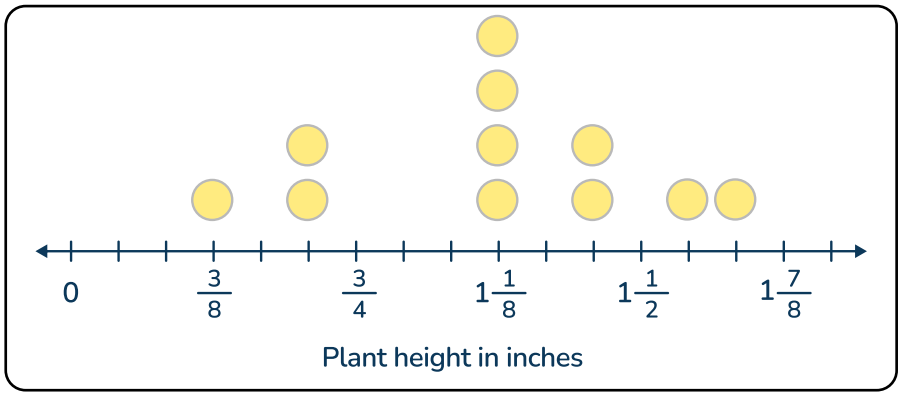
33 Maya and her brother Lucas ordered two cakes for dessert. The shaded part of the circle represents the portion of the cake Lucas ate. Maya ate $\frac{1}{4}$ more than Lucas. How much cake was left over?



A. $1\frac{1}{3}$
B. $\frac{1}{6}$
C. $1\frac{1}{12}$
D. $\frac{6}{6}$ or 1 whole

34 A class is growing plants for a science experiment. Below is the height of the plants after one week.



What is the difference between the shortest and tallest plant?

A. 2 inch

B. $1\frac{3}{8}$ inches

C. $\frac{3}{8}$ of an inch

D. 5 inches

---

35 Ella has $\frac{3}{4}$ of a cup of birdseed. She uses it to feed 4 birds equally. How much seed does each bird get?

Which expressions fit the story context? Select all the correct answers.

A. $\frac{3}{4} \times 4$

B. $4 \times \frac{3}{16}$

C. $\frac{3}{4} \div 4$

D. $4 \div \frac{3}{4}$

E. $\frac{3}{16} - \frac{1}{4}$

36 Complete the statement: 40 is ____ times the size of 4,000.

A. 100

B. $\frac{1}{10}$

C. 10

D. $\frac{1}{100}$

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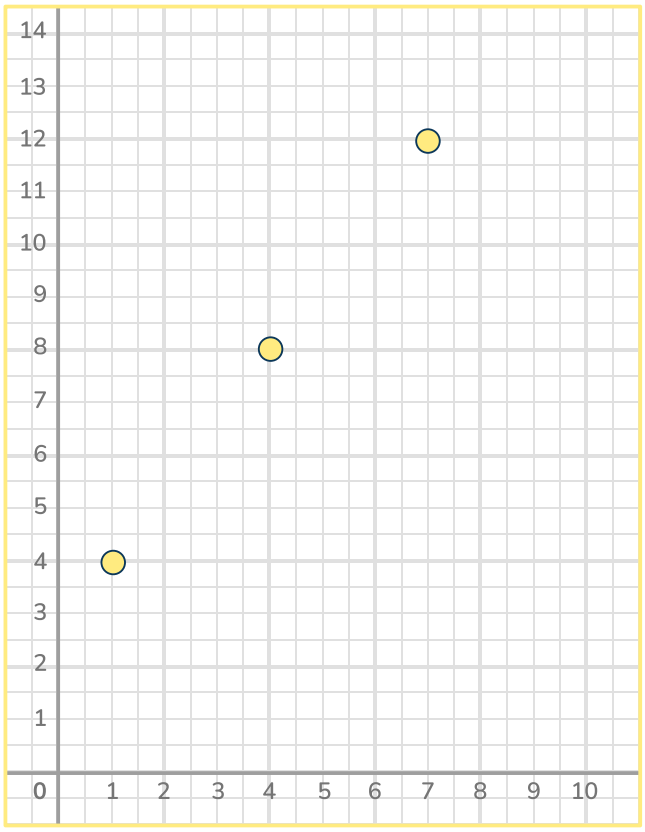
37 The graph below shows ordered pairs that make up two patterns.



What are the rules for the two patterns shown by the ordered pairs?

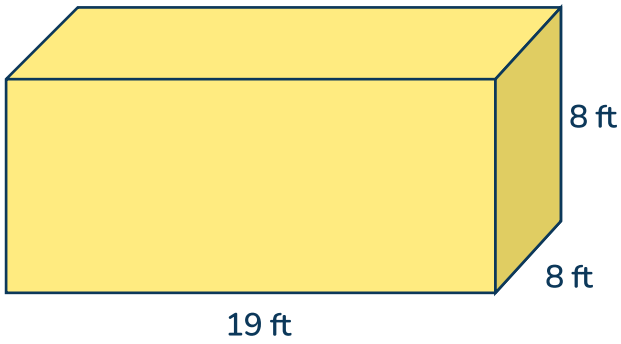
A. x-coordinate: Add 3
y-coordinate: Add 4

B. x-coordinate: Add 4
y-coordinate: Add 3

C. x-coordinate: Multiply by 3
y-coordinate: Multiply by 4

D. x-coordinate: Multiply by 4
y-coordinate: Multiply by 3

38 What is the volume of the rectangular prism?



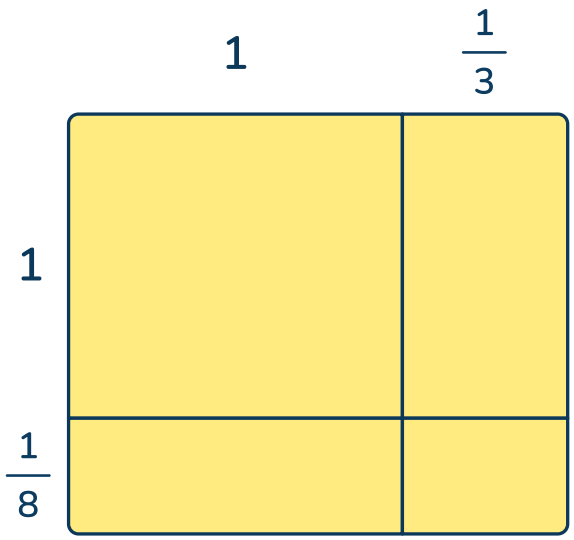
A. 35 square feet
B. 152 square feet
C. 1,216 cubic feet
D. 304 cubic feet

---

39 How many centimeters are in 0.07 meters?

A. 0.07 cm
B. 7 cm
C. 70 cm
D. 700 cm

40 Diego is solving $1\frac{1}{3} \times 1\frac{1}{8}$. He draws the model below.



Which expression represents Diego's area model?

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

B. $1 + 1 + 1 + 1$

C. $\frac{8}{24} + \frac{4}{24} + \frac{2}{24} + \frac{1}{24}$

D. $1 + \frac{1}{3} + \frac{1}{8} + \frac{1}{24}$

Standard: 5.NBT.3
DOK 3
Short Answer Response - 3 points

41 The temperature of a lake is about 72.4°. If the temperature was rounded to the nearest tenth, what are three possible actual temperatures of the lake?

Write the three numbers:

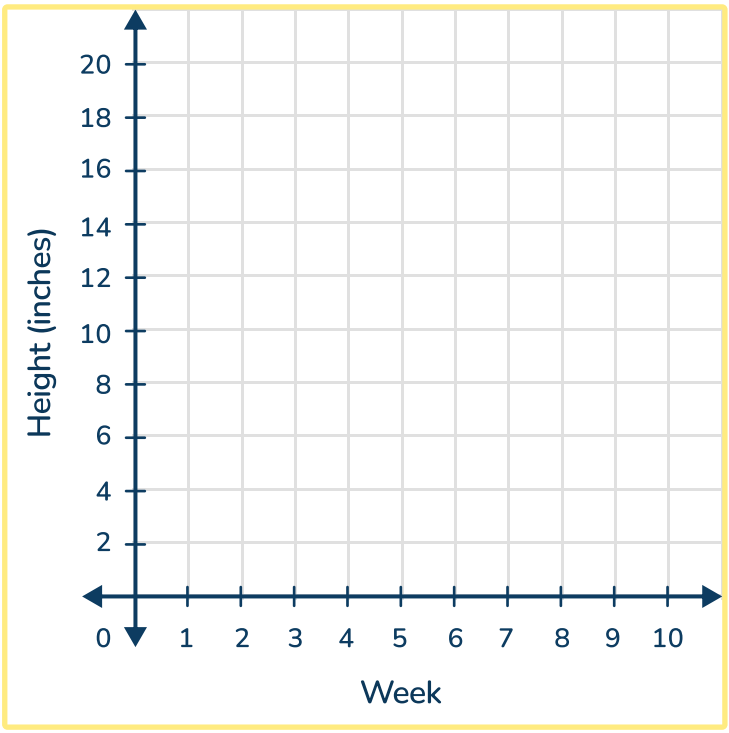
Explain how you solved.

Extended response - 4 points
Standard: 5.G.1, 5.G.2
DOK 3

42 A farmer planted a seed and then measured the height of the plant each week for ten weeks, rounded to the nearest inch. The table shows the data the farmer collected.

Week	1	2	3	4	5	6	7	8	9	10
Height	2 in.	3 in.	4 in.	6 in.	7 in.	9 in.	11 in.	14 in.	15 in.	16 in.

Part A:
Plot each pair of numbers on the coordinate grid below.



Part B:
Between which two weeks did the plant make the greatest amount of growth? Use the completed grid to explain how you know.

_____

_____

_____

_____

Extended response - 4 points
Standard: 5.NF.1, 5.NF.2
DOK 3

43 Tyrese solved the following equation:

$$\frac{3}{4} + \frac{1}{5} = \frac{4}{9}$$

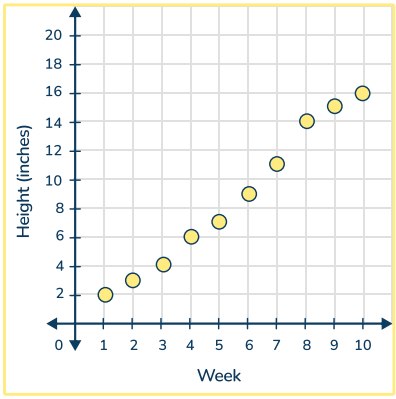
Is Tyrese's answer reasonable? Decide without solving (using mental estimation or benchmark fractions to decide) and explain your thinking.

Answer Key - Multiple Choice

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

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

Item	KEY	Rationale
41	3 points	To receive 3 points, students need to write three correct numbers, and provide a correct explanation that shows decimal place value understanding.
	2 points	To receive 2 points, students need to write at least 2 correct numbers **AND** provide a correct explanation that shows decimal place value understanding.
	1 point	To receive 1 point, students need to write at least 2 correct numbers **OR** provide a correct explanation that shows decimal place value understanding.
	0 points	Students will receive 0 points if they leave the response blank, or if write two or more incorrect numbers **AND** fail to write a response that shows decimal place value understanding.

Item	KEY	Rationale
42	4 points	In order to receive 4 points, students need to correctly answer **all parts** of Part A **and** Part B. Part B should include a thorough explanation of their answer. **Part A:** Students must recognize that they can create ordered pairs from the data in the table. The ordered pairs are as follows: (1,2) (2,3) (3,4) (4,6) (5,7) (6,9) (7,11) (8,14) (9,15) (10,16) Each ordered pair should be correctly plotted on the coordinate grid.  **Part B:** Students should correctly answer that the plant made the greatest amount of growth between week 7 and 8. They should also explain that this is shown on the grid as the points make the greatest vertical jump between those two weeks (11 inches to 14 inches)
	3 point	In order to receive 3 points, students may answer all parts of Part A **and** Part B, but they may not have a thorough explanation of how the completed coordinate grid shows the greatest amount of growth between weeks 7 and 8.
	2 point	In order to receive 2 points, students may • make a mistake on Part A, which then causes them to make a math mistake on Part B, as well. (Example: incorrectly plot the points on the graph) • only answer one part correctly. **OR** • fail to explain in a way that lets the teacher know the student can interpret the completed grid correctly.
	1 point	To receive 1 point, students may get one part of the answer correct (such as plotting the points on the grid).
	0 points	To receive 0 points, the student must leave the answer blank or get no parts of the problem correct.

Item	KEY	Rationale
43	4 points	The student clearly explains that Tyrese's answer is not reasonable. Student's response clearly shows fraction number sense, including (but not limited to)... • That $\frac{3}{4}$ is greater than $\frac{1}{2}$ and $\frac{4}{9}$ is less than $\frac{1}{2}$ • Therefore adding $\frac{1}{5}$ to $\frac{3}{4}$ should be more than $\frac{1}{2}$, not less OR • That $\frac{3}{4}$ is $\frac{1}{4}$ away from 1 whole • That $\frac{4}{9}$ is $\frac{5}{9}$ away from 1 whole • Therefore adding $\frac{1}{5}$(which is a little smaller than $\frac{1}{4}$),will be a sum close to 1 whole, which $\frac{4}{9}$ is not
	3 points	Student explains that Tyrese's answer is not reasonable. Student's response clearly shows fraction number sense, including (but not limited to) the examples above, however the student makes 1 mistake or leaves out 1 part.
	2 points	Student states that Tyrese's answer is not reasonable. Student's response shows some fraction number sense (correct benchmarks or estimation value for individual fractions), but the student does not connect this to the overall equation or parts of the explanation are unclear.
	1 point	Student's response shows some fraction number sense (correct benchmarks or estimation value for individual fractions), but the student makes 1 or 2 mistakes AND parts of the explanation are unclear. **OR** Student explains that Tyrese added the denominators when he should have found common denominators, which is not the correct algorithm. However, the student does not give an explanation that shows fraction number sense.
	0 points	The student leaves the response blank. **OR** The student makes more than 2 mistakes when estimating or using fraction benchmarks. **OR** The student's explanation shows little to no fraction number sense.

ANSWERS SORTED BY CCSS STRAND

OA			
Item number	Correct answer	Standard(s)	DOK
5	C	**5.OA.2**	DOK 1
11	B	**5.OA.1**	DOK 1
13	C	**5.OA.3**	DOK 3
20	B	**5.OA.3**	DOK 3
24	C	**5.OA.1**	DOK 1
37	A	**5.OA.3**	DOK 3

NBT			
Item number	Correct answer	Standard(s)	DOK
1	C	**5.NBT.7**	DOK 2
4	D	**5.NBT.5**	DOK 2
10	C	**5.NBT.7**	DOK 2
12	D	**5.NBT.3.b**	DOK 2
15	C	**5.NBT.3.a**	DOK 1
17	D	**5.NBT.3.a**	DOK 1
22	B	**5.NBT.4**	DOK 1
26	A	**5.NBT.6**	DOK 2
30	B	**5.NBT.2**	DOK 1
36	D	**5.NBT.1**	DOK 1
41	Short answer response	**5.NBT.3**	DOK 3

NF			
Item number	Correct answer	Standard(s)	DOK
3	D, E	5.NF.5a, **5.NF.5b**	DOK 3
6	B	**5.NF.1, 5.NF.2**	DOK 2
9	A	5.NF.7.b, **5.NF.7**.c	DOK 2
14	A	**5.NF.3**	DOK 2
18	B	**5.NF.4.b**	DOK 2
21	D	**5.NF.6**	DOK 2
27	D	**5.NF.5**	DOK 3
31	C	5.NF.3, 5.NF.4.a, **5.NF.6**	DOK 2
33	C	5.NF.1, **5.NF.2**	DOK 2
35	C	**5.NF.7a**	DOK 2
40	D	**5.NF.4b**	DOK 2
43	Extended Response	**5.NF.1, 5.NF.2**	DOK 3

MD			
Item number	Correct answer	Standard(s)	DOK
2	B	**5.MD.1**	DOK 1
7	B	5.MD.3a, 5.MD.3b, 5.MD.4, 5.MD.5a **5.MD.5b**	DOK 1
19	C	**5.MD.2, 5.NF.1**	DOK 2
25	B	**5.MD.5.c**	DOK 2
29	A	**5.MD.1**	DOK 2
34	B	**5.MD.2**	DOK 2
38	C	**5.MD.5b**	DOK 1
39	B	**5.MD.1**	DOK 1

G			
Item number	Correct answer	Standard(s)	DOK
8	D	**5.G.1**	DOK 1
16	B, D, E	**5.G.3,** 5.G.4	DOK 2
23	D	**5.G.2**	DOK 2
28	A, D	**5.G.3,** 5.G.4	DOK 1
32	D	**5.G.1**	DOK 1
42	Extended Response	**5.G.1, 5.G.2**	DOK 3

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