



**THIRD SPACE
LEARNING**

5th Grade CCSS State Test

Common Core 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 2 watermelons and 3 bunches of bananas?

- A. \$10.59
- B. \$20.46
- C. \$20.80
- D. \$21.90

2 What fraction of a meter is 20 centimeters?

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

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

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

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

3 A certain fraction is greater than 0 and less than 1. When that fraction is multiplied by 3, 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 Camilla found the product of 327 and 43. Her work is shown below. Her teacher was unable to read one of the numbers in her work.

$$\begin{array}{r}
 \begin{array}{r}
 ^2 \\
 ^1 3 2 7
 \end{array} \\
 \times 4 3 \\
 \hline
 ^1 9 8 1 \\
 + ^1 1 ^1 3, \boxed{} 8 0 \\
 \hline
 1 4, 0 6 1
 \end{array}$$

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

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

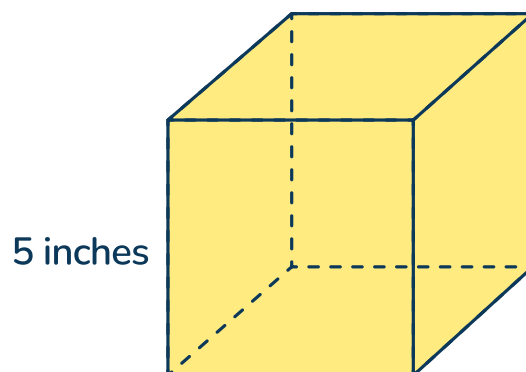
- 5 Which expression shows '5 less than the quotient of 3 and 4'?

- A. $5 - 3 \div 4$
- B. $3 \times 4 - 5$
- C. $5 - (3 + 4)$
- D. $\frac{3}{4} - 5$

- 6 Noah built a new garden bed in his backyard. He needs to fill it with $10\frac{1}{4}$ cubic yards of soil. He has already poured in $7\frac{5}{12}$ cubic yards of soil. How much more soil does he need to pour in to fill the garden bed? Answer in lowest terms .

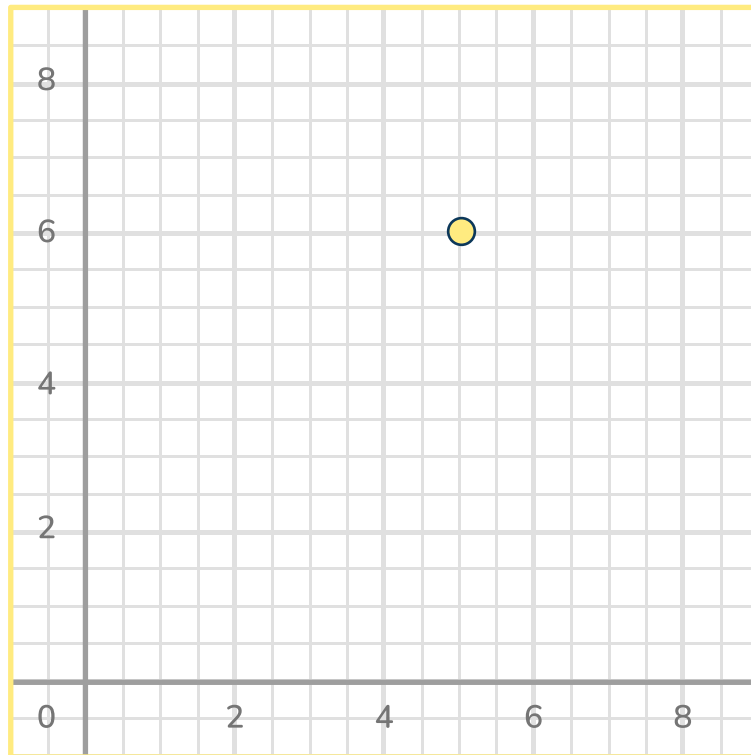
- A. $17\frac{2}{3}$ cubic yards
B. $2\frac{5}{6}$ cubic yards
C. $3\frac{10}{12}$ cubic yards
D. $3\frac{1}{6}$ cubic yards
-

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



- A. 5×6
B. $5 \times 5 \times 5$
C. $6 \times (5 + 5 + 5 + 5)$
D. $5 + 5 + 5 + 5 + 5 + 5$

- 8 What are the coordinates of the point shown?



- A. (6, 5)
- B. (6, 6)
- C. (5, 5)
- D. (5, 6)

-
- 9 Harley has been measuring a plant for a science project. The flower has grown $\frac{1}{3}$ of an inch each week and has grown a total of 2 inches taller. How many weeks has Harley been measuring this flower?

- A. 6 weeks
- B. $\frac{1}{6}$ of a week
- C. 2 weeks
- D. 5 weeks

- 10 Yeva and her 3 friends go out to eat at a restaurant. At the end of the meal, the total bill is \$72.36. They decide to split the bill equally. How much will each friend pay?

A. \$289.44
B. \$24.12
C. \$18.09
D. \$217.08

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

$$1 + 15 \times 4 - 50 + 8$$

A. 3
B. 19
C. 22
D. 6

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

Runner	Time (minutes)
1	6.42
2	7.114
3	7.24
4	6.4

Which comparison of these times is NOT correct?

- A. $6.4 < 6.42$
 - B. $7.4 > 7.14$
 - C. $6.4 < 7.114$
 - D. $7.114 > 7.24$
-

- 13 Emma wrote down two patterns.

Pattern A: 0, 12, 24, 36, 48, 60...

Pattern B: 0, 4, 8, 12, 16, 20...

Which statement correctly compares Emma'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 B are 8 more than the numbers in Pattern A.
- D. The numbers in Pattern B are 3 times the numbers in Pattern A.

- 14 Four chocolate bars are shared equally between 5 people. What fraction of chocolate bar will each person get?

A. $\frac{4}{5}$

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

C. $\frac{5}{4}$

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

- 15 What number is three hundred seven and one hundred eighty six thousandths?

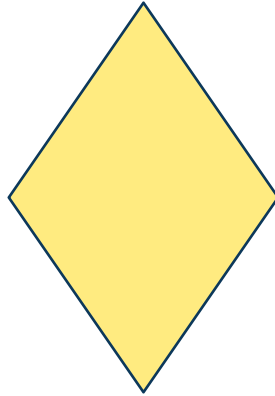
A. 307,186

B. 3,007.186

C. 307.186

D. 307.0186

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

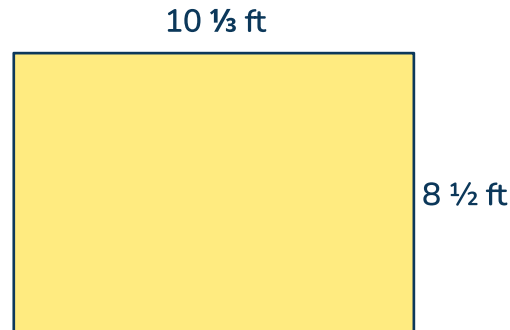


- A. Rhombus
 - B. Rectangle
 - C. Square
 - D. Parallelogram
 - E. Quadrilateral
-

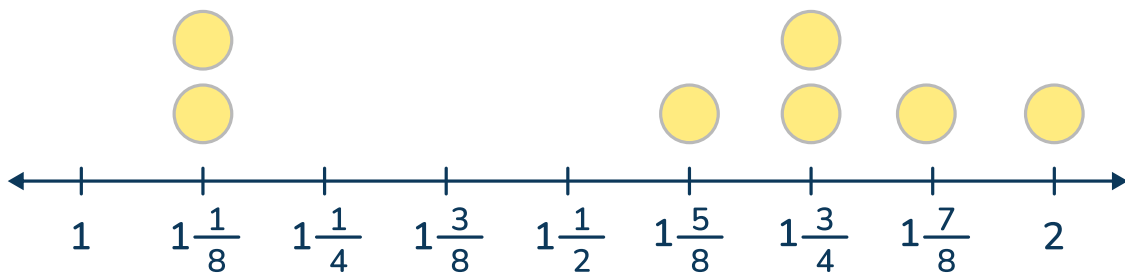
- 17 What is the correct way to write 702.203 in expanded form?

- A. $7 \times 100 + 2 \times 1 + 2 \times \left(\frac{1}{10}\right) + 3 \times \left(\frac{1}{1,000}\right)$
- B. $7 \times 100 + 2 \times 1 + 2 \times \left(\frac{1}{100}\right) + 3 \times \left(\frac{1}{1,000}\right)$
- C. $7 \times 100 + 2 \times 10 + 2 \times 1 + 3 \times \left(\frac{1}{100}\right)$
- D. $7 \times \left(\frac{1}{100}\right) + 2 \times \left(\frac{1}{1}\right) + 2 \times \left(\frac{1}{10}\right) + 3 \times \left(\frac{1}{100}\right)$

- 18 Muhammad is getting new carpet installed in his bedroom. The diagram below shows the dimensions of his bedroom floor. If the carpet covers the entire floor, what is the area of the carpet?



- A. $37 \frac{2}{3}$ square feet
B. $87 \frac{5}{6}$ square feet
C. $21 \frac{2}{3}$ square feet
D. $76 \frac{5}{6}$ square feet
-
- 19 The line plot below shows the heights of Jamal's plants in inches. What is the total height, in inches, of the 3 shortest plants?

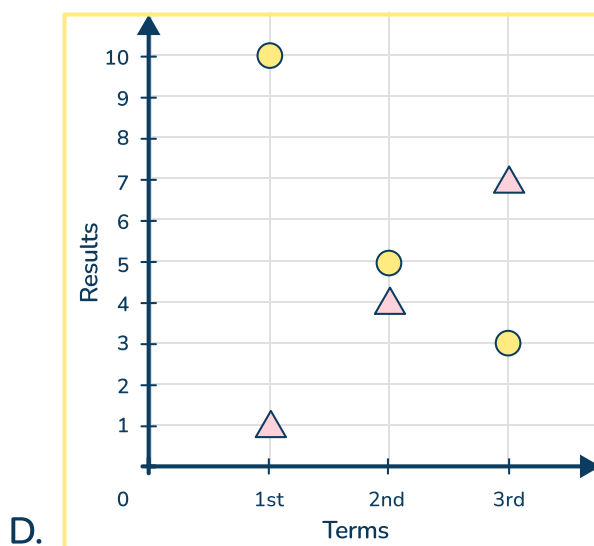
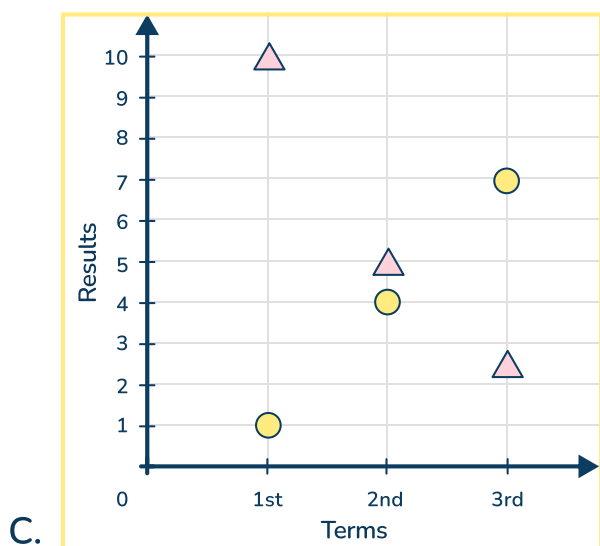
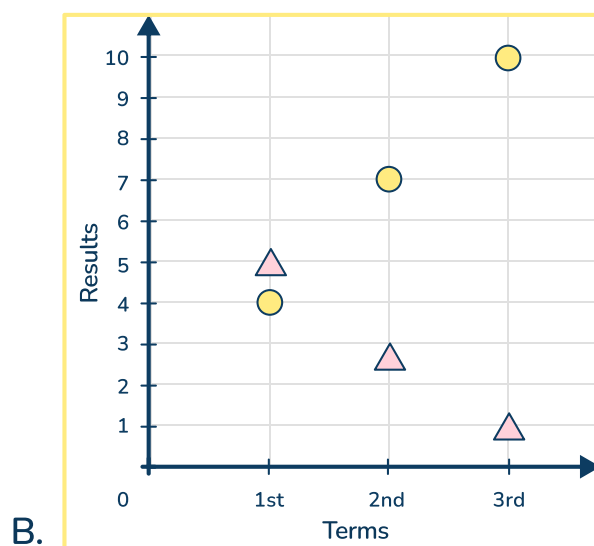
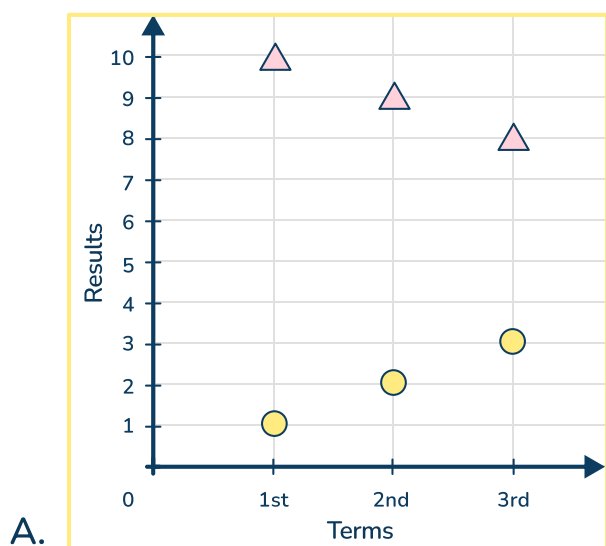


- A. $9 \frac{1}{4}$ inches
B. $5 \frac{1}{2}$ inches
C. $5 \frac{3}{8}$ inches
D. $3 \frac{7}{8}$ inches

20 The rules for two patterns are below.

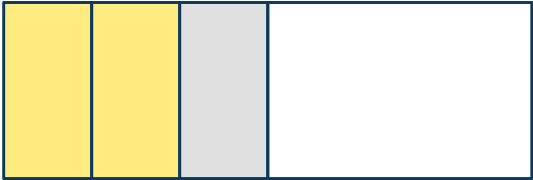
- Pattern J: Start at 1. Add 3.
- Pattern K: Start at 10. Multiply by $\frac{1}{2}$.

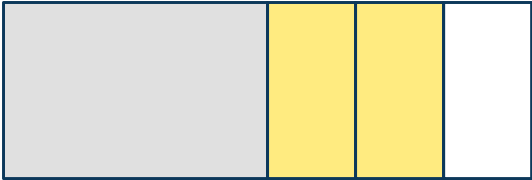
In the graphs, the circles represent Pattern J and the triangles represent Pattern K. Which graph is correct?



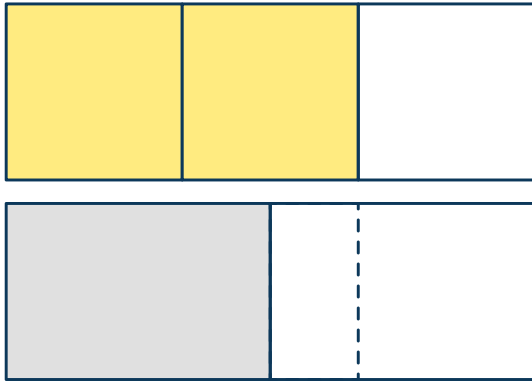
- 21 Viola was completing a history project. She had $\frac{1}{2}$ of a pound of sand. She uses $\frac{2}{3}$ of the sand. To find how much of a pound of sand she has left, Viola draws a model that represents 1 pound of sand.

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

A. 

B. 

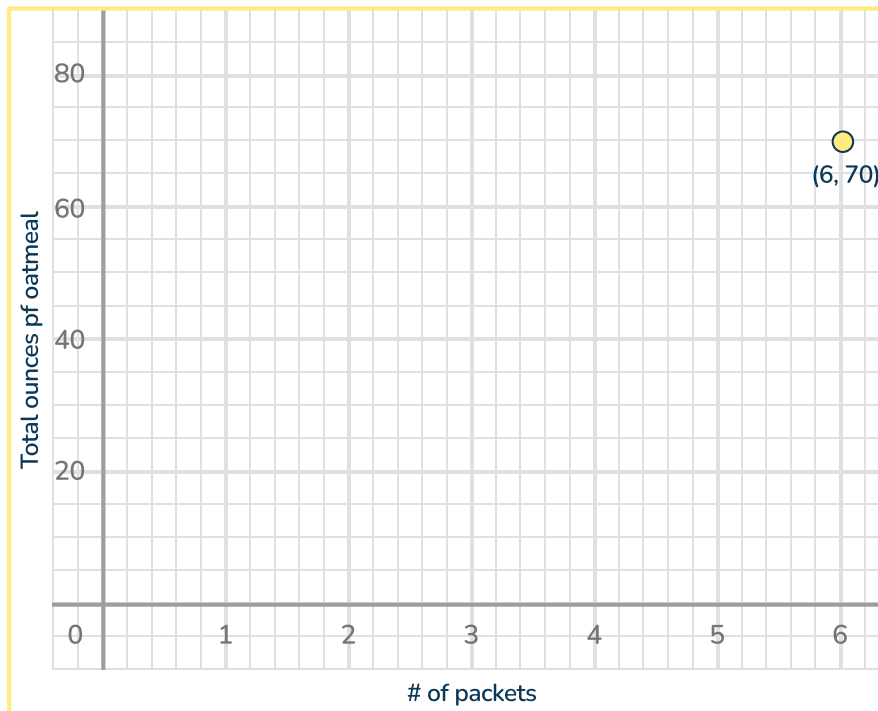
C. 

D. 

- 22 Round 12,380.806 to the nearest hundredth.

- A. 12,400
B. 12,380.81
C. 12,380.800
D. 12,380.9

- 23 The graph shows the total number of ounces in any number of packets of oatmeal.



Which statement correctly explains the meaning of (6, 70) on the graph?

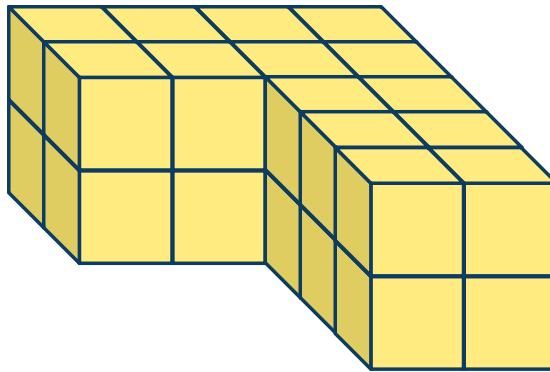
- A. Each packet of oatmeal is 20 ounces.
- B. 6 packets of oatmeal weigh 70 ounces.
- C. 70 packets of oatmeal have 6 total ounces.
- D. There are 72 ounces in 6 packets of oatmeal.

- 24 Solve the following equation.

$$3(12 \times 6 + 8) - 4 \div 2 + 2$$

- A. 120
- B. 236
- C. 240
- D. 112

- 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. 28
C. 20
D. 22
-
- 26 Jared's orchard has 714 apples ready to sell. The apples will be put in boxes of 23 and sold for \$7.50 per box. How many full boxes of apples can Jared make?

- A. 31 boxes
B. 232 boxes
C. 323 boxes
D. 32 boxes

27 Jayson volunteers at a zoo. He helps feed the animals based on the following rules.

- A lion eats $\frac{2}{3}$ the amount of food as a tiger.
- A cheetah eats $\frac{3}{2}$ the amount of food as a tiger.

Based on the information above, which statement is true?

- A. A cheetah and a lion eat the same amount of food.
 - B. A lion eats more than a tiger.
 - C. A cheetah eats less than a lion.
 - D. A lion eats less than a cheetah.
-

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

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

- 29 Miranda spent $2\frac{3}{4}$ hours practicing the drums. How many minutes did Miranda spend practicing the drums?

A. 275 minutes
B. 165 minutes
C. 195 minutes
D. 135 minutes

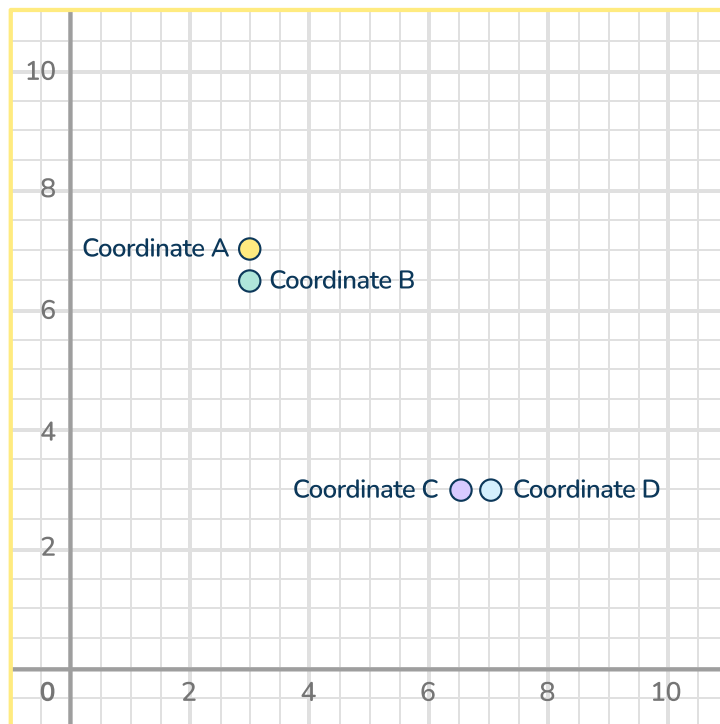
- 30 Which equation equals 0.5?

A. $50 \times 10^2 = ?$
B. $500 \times 10^3 = ?$
C. $50 \div 10^2 = ?$
D. $5,000 \div 10^3 = ?$

- 31 A fruit salad recipe requires $1\frac{3}{4}$ cups of blueberries. How many cups of blueberries would be needed to make $5\frac{1}{2}$ fruit salad recipes?

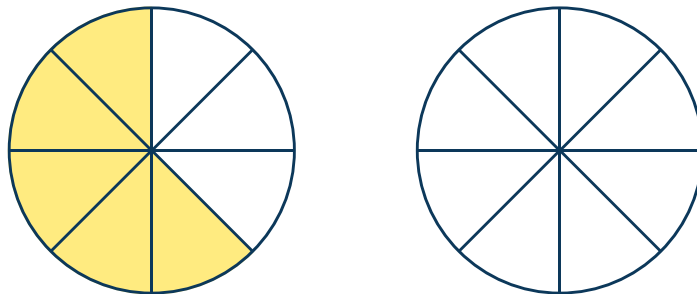
- A. $9\frac{5}{8}$ cups
- B. $7\frac{1}{4}$ cups
- C. $5\frac{3}{8}$ cups
- D. $38\frac{1}{2}$ cups

- 32 Which point shows (3, 7)?



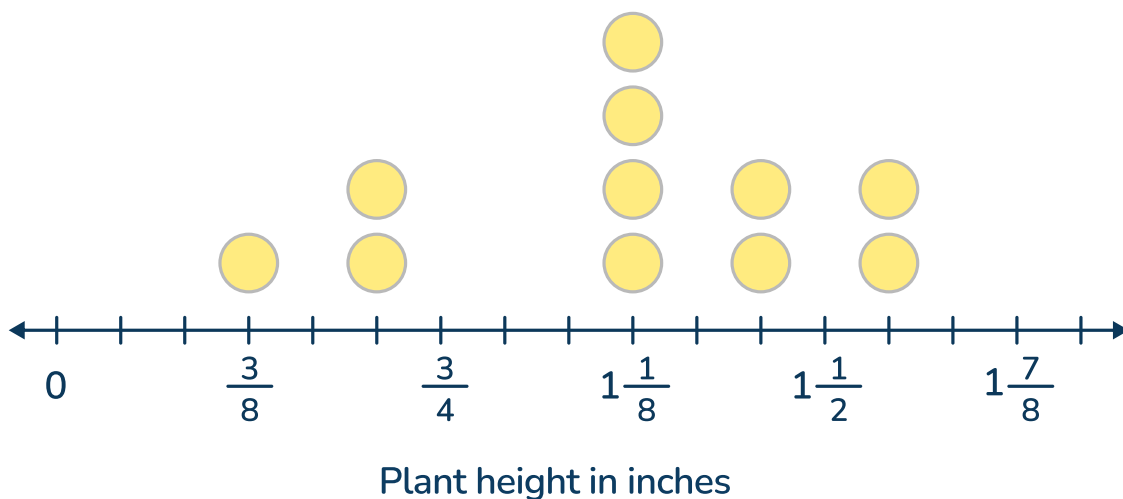
- A. Coordinate A
- B. Coordinate B
- C. Coordinate C
- D. Coordinate D

- 33 Blake and her sister ordered two pizzas for dinner. The shaded part of the circle represents the portion of the pizza Blake's sister ate. Blake ate $\frac{1}{4}$ more than her sister.



How much pizza was left over?

- A. $\frac{1}{8}$
 - B. $\frac{4}{8}$
 - C. $\frac{5}{8}$
 - D. $\frac{8}{8}$ 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. 3 inch
- B. $1\frac{1}{4}$ inches
- C. $\frac{6}{8}$ of an inch
- D. 6 inches

- 35 Story: Yan has $\frac{1}{4}$ of a cup of fish food. He uses it to feed 3 fish equally. How much food does each fish get?

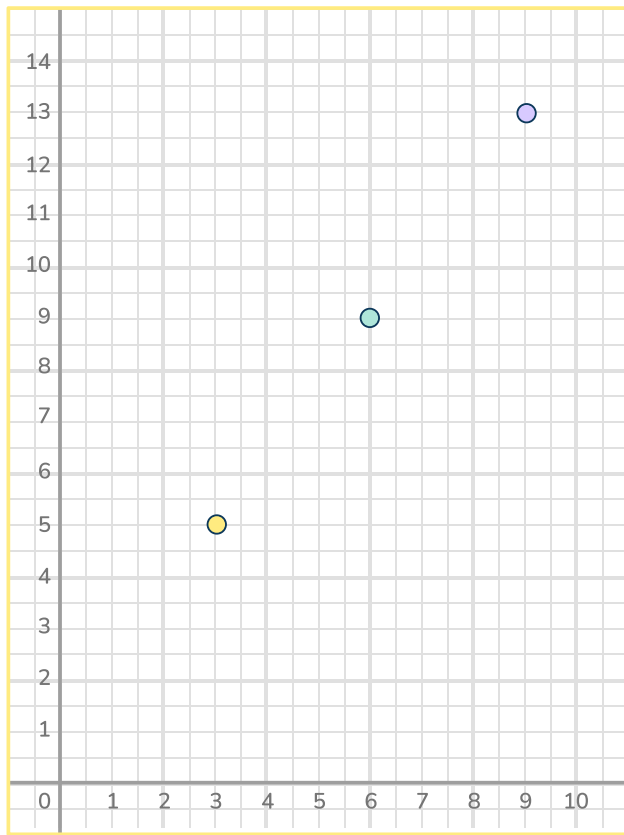
Which expressions fit the story context? Select all the correct answers.

- A. $\frac{1}{4} \times 3$
 - B. $3 \times \frac{1}{12}$
 - C. $\frac{1}{4} \div 3$
 - D. $3 \div \frac{1}{4}$
 - E. $\frac{1}{12} - \frac{1}{4}$
-

- 36 Complete the statement: 600 is ____ times the size of 60,000.

- A. 100
- B. $\frac{1}{10}$
- C. 10
- D. $\frac{1}{100}$

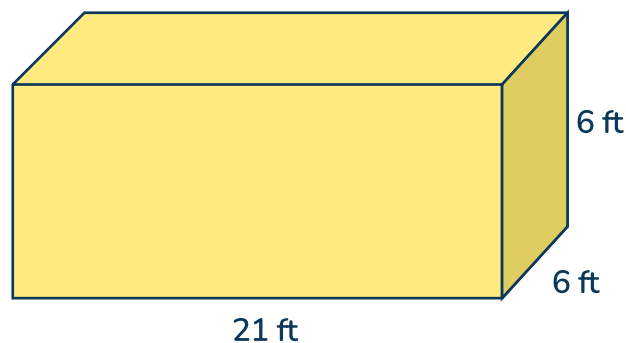
- 37 The graph below shows ordered pairs that make up two patterns.



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: Times 3
y-coordinate: Times 4
- D. x-coordinate: Times 4
y-coordinate: Times 3

- 38 What is the volume of the rectangular prism?

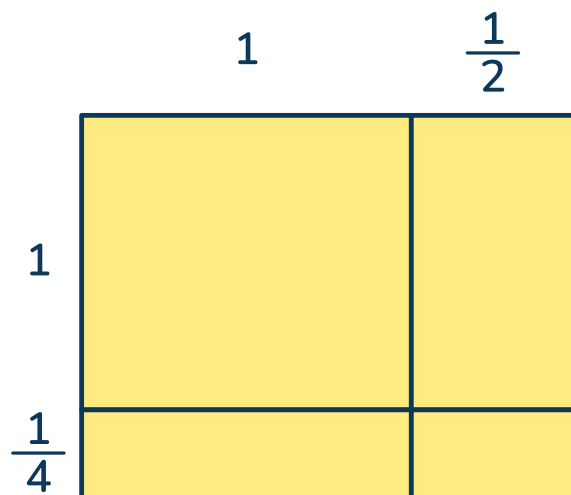


- A. 33 square feet
- B. 756 cubic feet
- C. 87 square feet
- D. 252 cubic feet

39 How many centimeters are in 0.7 meters?

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

40 Diego is solving $1\frac{1}{2} \times 1\frac{1}{4}$. 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. $\frac{8}{15} + \frac{4}{15} + \frac{2}{15} + \frac{1}{15}$
- D. $1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{8}$

Standard: 5.NBT.3

DOK 3

Short Answer Response - 3 points

41. The temperature of a lake is about 86.3° . 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.

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 points	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.

Extended response - 4 points

Standard: 5.G.1, 5.G.2

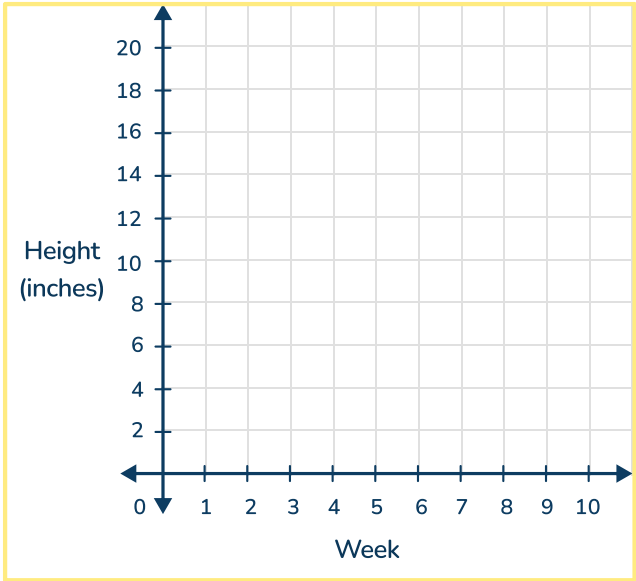
DOK 3

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	1 in.	2 in.	4 in.	5 in.	7 in.	11 in.	13 in.	14 in.	15 in.	16 in.

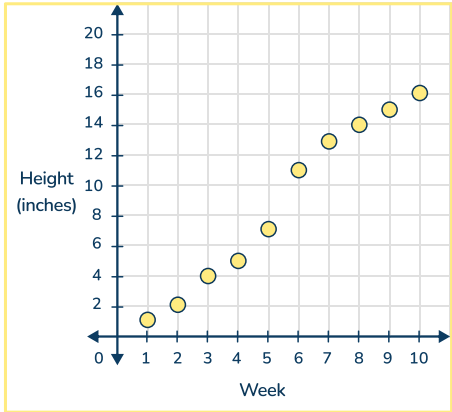
Part A:

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.

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: (1,1) (2,2) (3,4) (4,5) (5,7) (6,11) (7,13) (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 5 and 6. They should also explain that this is shown on the grid as the points make the greatest vertical jump between those two weeks (7 inches to 10 inches)
	3 points	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 5 and 6.
	2 points	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 points	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.

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Extended response - 4 points

Standard: 5.NF.1 and 5.NF.2

DOK 3

43. Tyrese solved the following equation:

$$\frac{2}{3} + \frac{1}{4} = \frac{3}{7}$$

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

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Item	KEY	Rationale
43	4 points	Student clearly explains that Tyrese's answer is not reasonable. Student's response clearly shows fraction number sense, including (but not limited to)... • That $\frac{2}{3}$ is greater than $\frac{1}{2}$ and $\frac{3}{7}$ is less than $\frac{1}{2}$ • Therefore adding $\frac{1}{4}$ to $\frac{2}{3}$ should be more than $\frac{1}{2}$, not less OR • That $\frac{2}{3}$ is $\frac{1}{3}$ away from 1 whole • That $\frac{3}{7}$ is $\frac{4}{7}$ away from 1 whole • Therefore adding $\frac{1}{4}$ (which is a little smaller than $\frac{1}{3}$), will be a sum close to 1 whole, which $\frac{3}{7}$ 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 points	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.

Extended response - 4 points

For more resources and intervention support go to thirdspacelearning.com

Answer Key - Multiple Choice

Item number	Correct answer	Standard(s)	DOK
1	D	5.NBT.7	DOK 2
2	A	5.MD.1	DOK 1
3	B, C, D	5.NF.5a, 5.NF.5b	DOK 3
4	A	5.NBT.5	DOK 2
5	D	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	D	5.OA.3	DOK 3
14	A	5.NF.3	DOK 2
15	C	5.NBT.3a	DOK 1
16	A, D, E	5.G.3, 5.G.4	DOK 2
17	A	5.NBT.3a	DOK 1
18	B	5.NF.4b	DOK 2
19	D	5.MD.2, 5.NF.1	DOK 2

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

ANSWERS SORTED BY CCSS STRAND

OA			
5	D	5.OA.2	DOK 1
11	B	5.OA.1	DOK 1
13	D	5.OA.3	DOK 3
20	C	5.OA.3	DOK 3
24	C	5.OA.1	DOK 1
37	A	5.OA.3	DOK 3

NBT			
1	D	5.NBT.7	DOK 2
4	A	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	A	5.NBT.3.a	DOK 2
22	B	5.NBT.4	DOK 1
26	A	5.NBT.6	DOK 2
30	C	5.NBT.2	DOK 1
36	D	5.NBT.1	DOK 1
41	Short answer response	5.NBT.3	DOK 3

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NF			
3	B, C, D	5.NF.5.a, 5.NF.5.b*	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	A	5.NF.6	DOK 2
27	D	5.NF.5	DOK 3
31	A	5.NF.3, 5.NF.4.a, 5.NF.6	DOK 2
33	C	5.NF.1, 5.NF.2	DOK 2
35	B, 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			
2	A	5.MD.1	DOK 1
7	B	5.MD.3.a, 5.MD.3.b, 5.MD.4 , 5.MD.5.a 5.MD.5.b	DOK 1
19	D	5.MD.2, 5.NF.1	DOK 2
25	B	5.MD.5.c	DOK 2
29	B	5.MD.1	DOK 2
34	B	5.MD.2	DOK 2
38	B	5.MD.5b	DOK 1
39	C	5.MD.1	DOK 1

G			
8	D	5.G.1	DOK 1
16	A, D, E	5.G.3*, 5.G.4	DOK 2
23	B	5.G.2	DOK 2
28	A, D	5.G.3*, 5.G.4	DOK 1
32	A	5.G.1	DOK 1
42	Extended Response	5.G.1, 5.G.2	DOK 3

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Michelle Craig, Instructional Coach,
Sherwood Forest Elementary, Washington

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