

Name: \_\_\_\_\_



# New York State *Testing Program*

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## 2017 Common Core Mathematics Test Book 1

Grade **3**

May 2–4, 2017

Released Questions

# Book 1



## TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before choosing your response.
- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.

**1** Theo divided a garden equally into 6 parts. He planted seeds in 5 of the parts. In what fraction of the garden did Theo plant seeds?

A  $\frac{1}{6}$

B  $\frac{1}{5}$

C  $\frac{5}{6}$

D  $\frac{6}{5}$

**2** What number makes the equation below true?

$$35 \div ? = 7$$

A 5

B 6

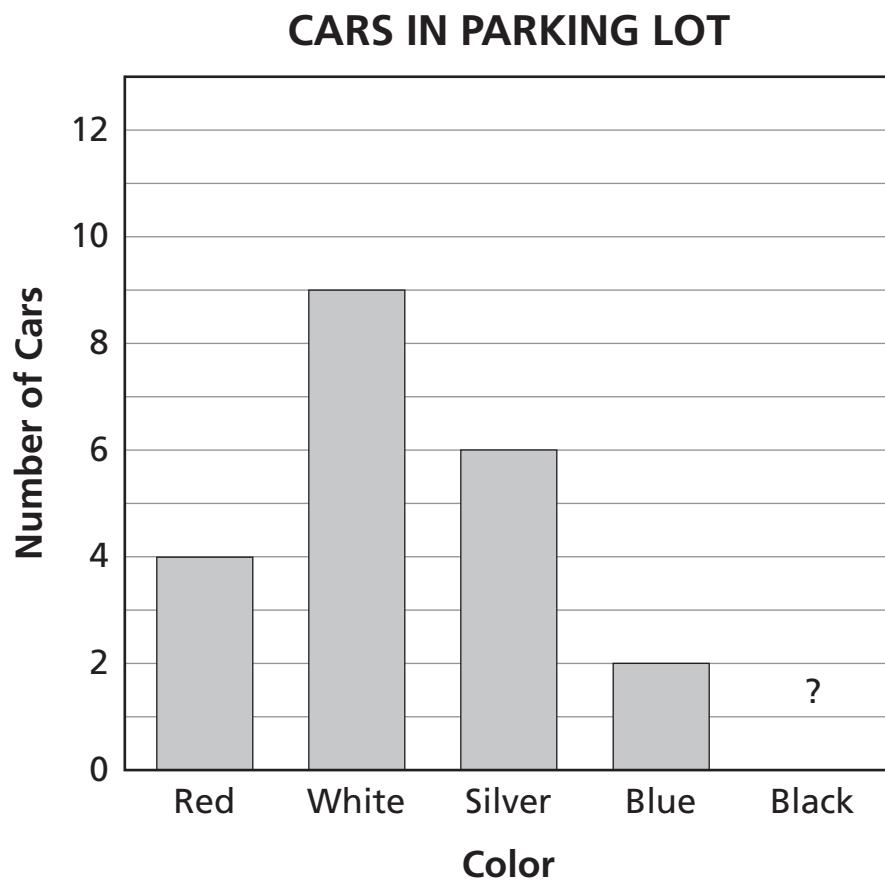
C 7

D 8

**GO ON**

5

The bar graph shows the numbers and colors of cars in a parking lot.



The total number of silver and black cars equals the total number of red, white, and blue cars. How many black cars are in the parking lot?

- A 9
- B 10
- C 15
- D 30

**GO ON**

**6**

Colton and his dad bought a gallon of paint that cost \$13. They also bought 2 brushes that cost \$9 each. What was the total cost, not including tax, of the brushes and the paint they bought?

- A \$22
- B \$24
- C \$31
- D \$35

**7**

The table below shows four numbers rounded to the nearest hundreds place. One of the numbers is rounded incorrectly.

Starting Number	Rounded to the Nearest Hundred
1,212	1,200
2,396	2,300
3,636	3,600
5,573	5,600

Which number is rounded to the nearest hundreds place incorrectly?

- A 1,212
- B 2,396
- C 3,636
- D 5,573

**GO ON**

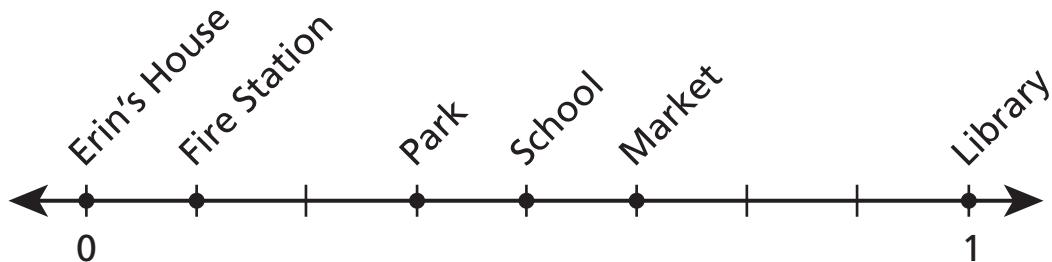
**8**

Tayshawn sorts 56 marbles into equal groups with no marbles left over. Which statement could be true of the groups of marbles Tayshawn sorts?

- A There are 6 groups of marbles with 8 marbles in each group.
- B There are 7 groups of marbles with 7 marbles in each group.
- C There are 8 groups of marbles with 7 marbles in each group.
- D There are 9 groups of marbles with 6 marbles in each group.

**9**

Erin walked 1 mile from her house to the library. Along the way, she passed several places shown on the number line below.



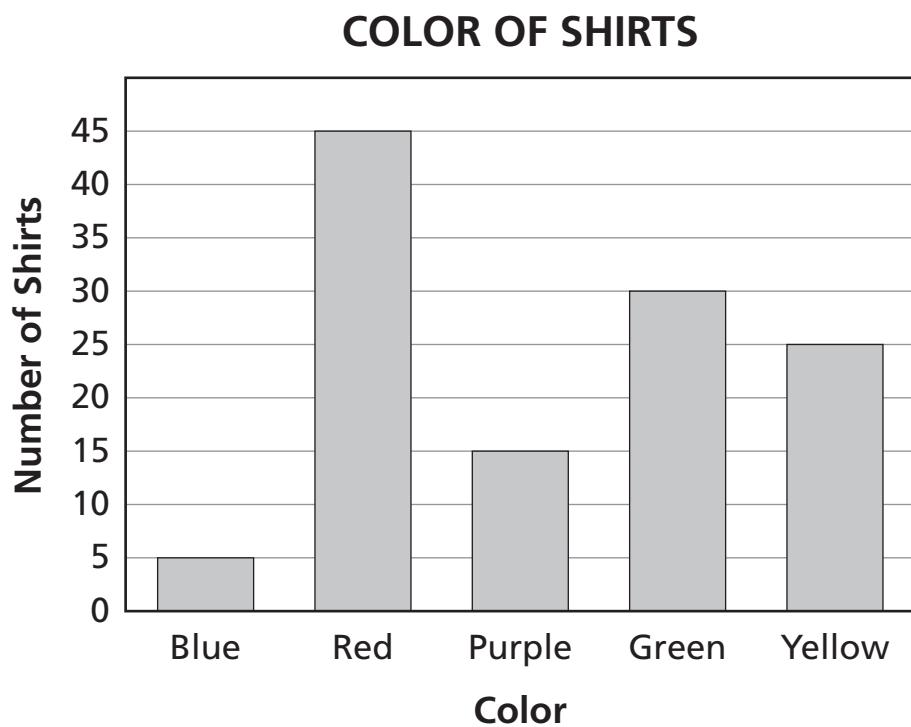
Which place is  $\frac{4}{8}$  mile from Erin's house?

- A the fire station
- B the park
- C the school
- D the market

**GO ON**

**13**

The graph below shows the number of shirts of each color in a store.



How many more red shirts than the total number of blue shirts and yellow shirts are in the store?

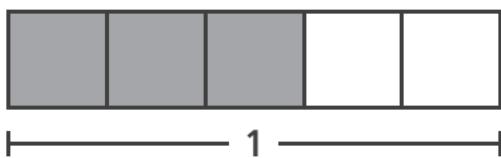
- A 15
- B 30
- C 40
- D 45

**GO ON**

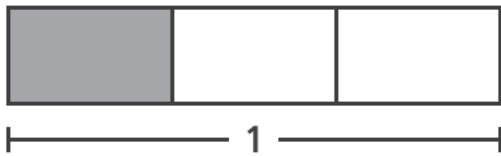
**16**

Which of these is shaded to represent  $\frac{2}{3}$ ?

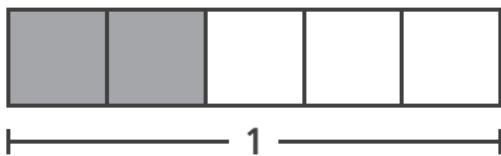
A



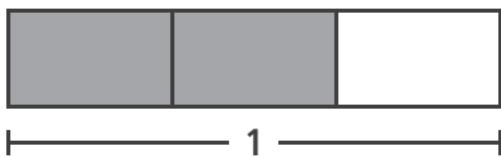
B



C



D



**17**

Carmen saved 592 pennies. Her sister saved 128 pennies. Together, they put 250 pennies in wrappers and took them to the bank. What is the total number of pennies, rounded to the nearest hundred, Carmen and her sister have left?

- A 300
- B 500
- C 700
- D 1,000

**GO ON**

**20**

Which fraction does point P represent on the number line below?



- A**  $\frac{1}{6}$
- B**  $\frac{2}{6}$
- C**  $\frac{1}{4}$
- D**  $\frac{2}{4}$

**21**

Anya placed 16 cups in rows on a table. There are 8 cups in each row. Which equation could be used to represent this situation?

- A**  $16 \times 8 = \square$
- B**  $8 + 16 = \square$
- C**  $\square \div 8 = 16$
- D**  $\square \times 8 = 16$

**GO ON**

**22**

Which fraction is equal to  $\frac{2}{8}$ ?

A  $\frac{8}{2}$

B  $\frac{1}{2}$

C  $\frac{2}{4}$

D  $\frac{1}{4}$

**STOP**

# Book 2



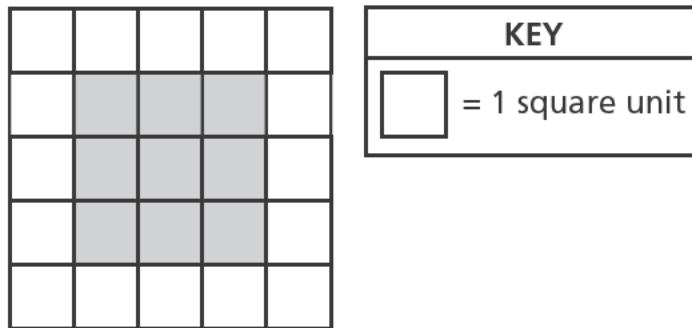
## TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

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- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.

**23**

Brandon used square tiles to find the area of the shaded part of the picture below.



What is the area of the shaded part of the picture?

- A** 3 square units
- B** 6 square units
- C** 8 square units
- D** 9 square units

**24**

Which pair of equations is true when the number 8 is placed in the blanks?

**A**  $4 \times \underline{\quad} = 32$   
 $32 \div \underline{\quad} = 4$

**B**  $5 \times \underline{\quad} = 40$   
 $\underline{\quad} \div 40 = 5$

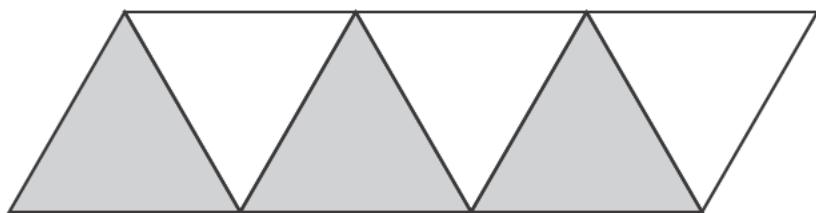
**C**  $6 \times 48 = \underline{\quad}$   
 $48 \div \underline{\quad} = 6$

**D**  $7 \times \underline{\quad} = 63$   
 $63 \div \underline{\quad} = 7$

**GO ON**

25

The figure below is divided into equal-sized parts.



Which fraction is represented by the shaded parts of the figure?

A  $\frac{1}{3}$

B  $\frac{3}{3}$

C  $\frac{3}{6}$

D  $\frac{6}{3}$

26

There are 12 students in Ms. Miller's class. She needs 24 juice boxes for a class party. The juice boxes come in packages of 6 juice boxes each. Which expression represents the number of packages of juice boxes Ms. Miller needs to buy for the class party?

A  $24 + 12$

B  $36 \div 6$

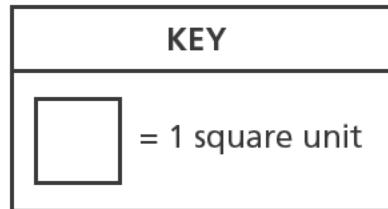
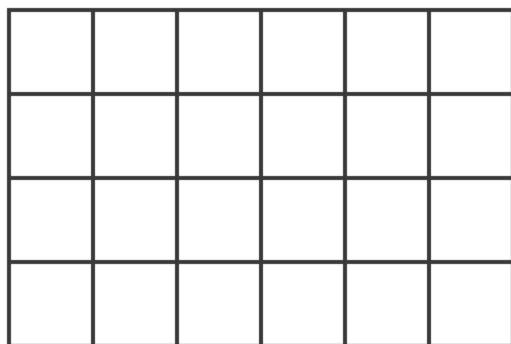
C  $12 \times 6$

D  $24 \div 6$

**GO ON**

**27**

The figure below is tiled with squares.



Which expression could be used to find the area of this figure?

- A**  $4 \times 6$
- B**  $4 + 6$
- C**  $4 \times 4 \times 6 \times 6$
- D**  $4 + 4 + 6 + 6$

**GO ON**

**29** Which expression is equivalent to  $5 \times 9$ ?

- A  $(5 \times 4) \times (5 \times 5)$
- B  $(5 \times 5) + (5 \times 4)$
- C  $(5 \times 5) + (5 \times 9)$
- D  $(5 \times 9) \times (5 \times 9)$

**30** A coach rounded the number of runners at a track meet to the nearest 10. The rounded number of runners is 400. Which number could be the actual number of runners at the track meet?

- A 382
- B 397
- C 406
- D 447

**GO ON**

**31**

Last weekend Sanjay watched 3 television shows that were each 30 minutes long. He also watched 1 movie on television that was 90 minutes long. What is the total number of minutes Sanjay watched television last weekend?

- A 100
- B 120
- C 150
- D 180

**32**

A total of 30 players will play basketball at a park. There will be exactly 5 players on each team. Which statement correctly explains how to find the number of teams needed?

- A Add 5 to 30 to find 35 teams.
- B Divide 30 by 5 to find 6 teams.
- C Multiply 30 and 5 to find 150 teams.
- D Subtract 5 from 30 to find 25 teams.

**GO ON**

**35**

Frankie's music class begins at 9:40 a.m. The class is 45 minutes long. Which clock shows the time that Frankie's class ends?

A



C



B



D



**36**

What number multiplied by 4 equals 36?

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

**GO ON**

**37**

The fraction strip shown below is shaded to represent a fraction.



Which fraction strip is shaded to represent a fraction equal to the fraction strip shown above?

A



B



C



D



**38**

Which fraction comparison is **not** correct?

A  $\frac{1}{3} < \frac{2}{3}$

B  $\frac{3}{4} < \frac{1}{4}$

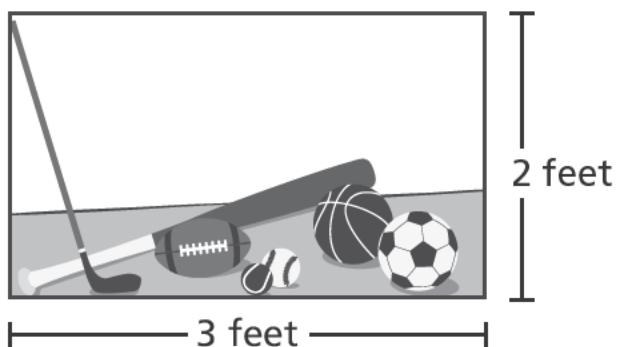
C  $\frac{2}{3} > \frac{2}{8}$

D  $\frac{5}{6} > \frac{5}{8}$

**GO ON**

**39**

Kelly has a rectangular poster in her room. The poster is shown below.



What is the area, in square feet, of Kelly's poster?

- A** 5
- B** 6
- C** 10
- D** 12

**40**

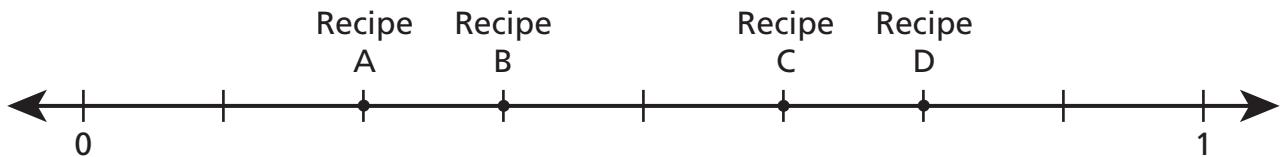
Ms. Perez drove a total of 40 miles in 5 days. She drove the same number of miles each day. How many miles did Ms. Perez drive each day?

- A** 5
- B** 7
- C** 8
- D** 9

**GO ON**

**41**

Four different recipes were used by students to bake cookies for a bake sale. The number line below shows the fraction of a cup of milk needed in each recipe.



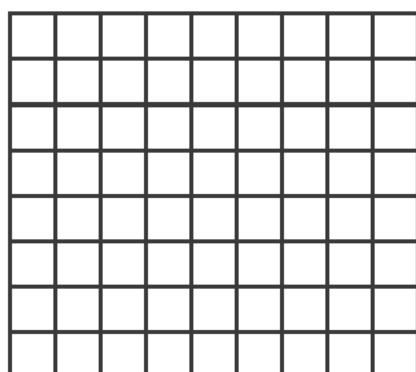
Which recipe needs  $\frac{3}{8}$  cup of milk?

- A** Recipe A
- B** Recipe B
- C** Recipe C
- D** Recipe D

**GO ON**

**43**

The diagram below represents a wall Kim painted in her basement.



KEY
<input type="checkbox"/> = 1 square foot

What is the area, in square feet, of the wall Kim painted?

- A 17
- B 34
- C 64
- D 72

**44**

Conor made 9 shapes with straws. Each shape had 5 straws. Conor used 15 more straws to make more shapes. What is the total number of straws Conor used to make all the shapes?

- A 20
- B 29
- C 45
- D 60

**STOP**

# Book 3



## TIPS FOR TAKING THE TEST

Here are some suggestions to help you do your best:

- Read each question carefully and think about the answer before writing your response.
- You have been provided with a ruler to use during the test. Use the ruler whenever you think it will help you to answer the question.
- Be sure to show your work when asked.

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

*Answer* \_\_\_\_\_

Explain why the answer you chose is less than  $\frac{1}{3}$ .

*Answer*

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**GO ON**

**46**

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

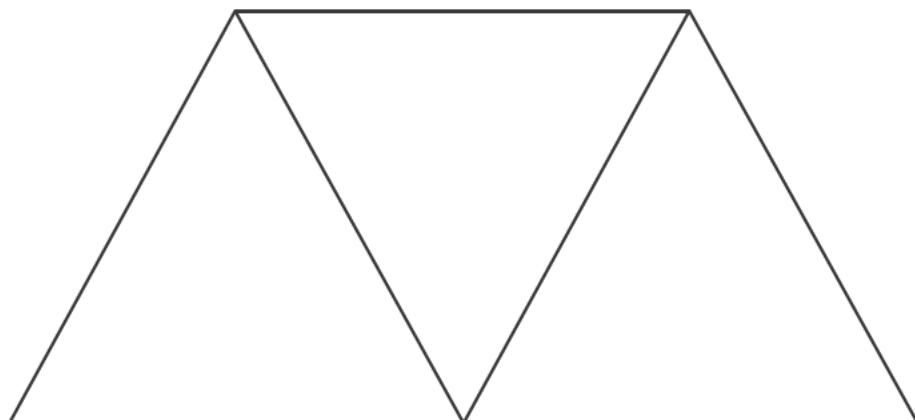
*Show your work.*

*Answer* \_\_\_\_\_ grams

**GO ON**

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

**Answer** \_\_\_\_\_

**Explain how you know your answer is correct.**

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**GO ON**

**48**

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

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**GO ON**

**49**

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

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What is the total number of balloons Mrs. Ruiz bought?

*Show your work.*

**Answer** \_\_\_\_\_ balloons

**GO ON**

**50**

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

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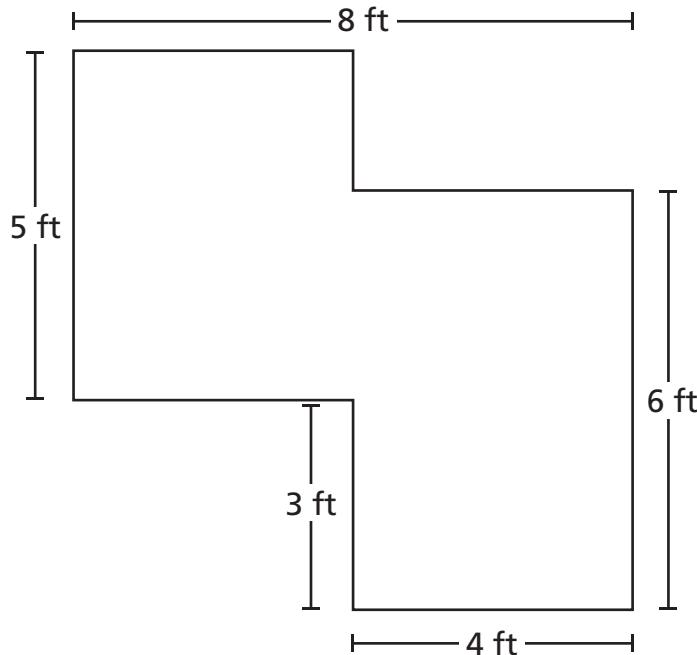
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**GO ON**

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

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What is the total area of the new lawn?

*Answer* \_\_\_\_\_ square feet

**GO ON**

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

*Difference in cost \$\_\_\_\_\_*

**STOP**

**THE STATE EDUCATION DEPARTMENT  
THE UNIVERSITY OF THE STATE OF NEW YORK / ALBANY, NY 12234  
2017 Mathematics Tests Map to the Standards  
Released Questions on EngageNY**

Grade 3	Question	Type	Key	Points	Standard	Cluster	Secondary Standard(s)	Multiple Choice Questions:		Constructed Response Questions:	
								Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)	
<b>Book 1</b>											
1	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions			0.76			
2	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking			0.90			
5	Multiple Choice	A	1	CCSS.Math.Content.3.MD.B.3	Measurement and Data			0.51			
6	Multiple Choice	C	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking			0.56			
7	Multiple Choice	B	1	CCSS.Math.Content.3.NBT.A.1	Number and Operations in Base Ten			0.62			
8	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking			0.67			
9	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations—Fractions			0.74			
13	Multiple Choice	A	1	CCSS.Math.Content.3.MD.B.3	Measurement and Data			0.66			
16	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions			0.88			
17	Multiple Choice	B	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking			0.44			
20	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.2a	Number and Operations—Fractions			0.38			
21	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.6	Operations and Algebraic Thinking			0.44			
22	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3a	Number and Operations—Fractions			0.51			
<b>Book 2</b>											
23	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.5b	Measurement and Data			0.94			
24	Multiple Choice	A	1	CCSS.Math.Content.3.OA.A.4	Operations and Algebraic Thinking			0.73			
25	Multiple Choice	C	1	CCSS.Math.Content.3.NF.A.1	Number and Operations—Fractions			0.85			

**Released Questions on EngageNY**

Grade 3	Question	Type	Key	Points	Standard	Cluster	Secondary	Multiple Choice Questions:	Constructed Response Questions:	
								Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
	26	Multiple Choice	D	1	CCSS.Math.Content.3.OA.A.2	Operations and Algebraic Thinking		0.63		
	27	Multiple Choice	A	1	CCSS.Math.Content.3.MD.C.7a	Measurement and Data		0.91		
	29	Multiple Choice	B	1	CCSS.Math.Content.3.OA.B.5	Operations and Algebraic Thinking		0.59		
	30	Multiple Choice	B	1	CCSS.Math.Content.3.NBT.A.1	Number and Operations in Base Ten		0.60		
	31	Multiple Choice	D	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking		0.59		
	32	Multiple Choice	B	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking		0.76		
	35	Multiple Choice	C	1	CCSS.Math.Content.3.MD.A.1	Measurement and Data		0.67		
	36	Multiple Choice	D	1	CCSS.Math.Content.3.OA.B.6	Operations and Algebraic Thinking		0.78		
	37	Multiple Choice	D	1	CCSS.Math.Content.3.NF.A.3b	Number and Operations—Fractions		0.60		
	38	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.3d	Number and Operations—Fractions		0.60		
	39	Multiple Choice	B	1	CCSS.Math.Content.3.MD.C.7b	Measurement and Data		0.64		
	40	Multiple Choice	C	1	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking		0.74		
	41	Multiple Choice	B	1	CCSS.Math.Content.3.NF.A.2b	Number and Operations—Fractions		0.76		
	43	Multiple Choice	D	1	CCSS.Math.Content.3.MD.C.6	Measurement and Data		0.88		
	44	Multiple Choice	D	1	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking		0.53		
<b>Book 3</b>										
	45	Constructed Response		2	CCSS.Math.Content.3.NF.A.3d	Number and Operations—Fractions			0.98	0.49
	46	Constructed Response		2	CCSS.Math.Content.3.MD.A.2	Measurement and Data			1.29	0.65

**Released Questions on EngageNY**

Grade 3 Question	Type	Key	Points	Standard	Cluster	Secondary	Multiple Choice Questions:	Constructed Response Questions:	
							Percentage of Students Who Answered Correctly (P-Value)	Average Points Earned	P-Value (Average Points Earned ÷ Total Possible Points)
47	Constructed Response		2	CCSS.Math.Content.3.G.A.2	Geometry			1.15	0.58
48	Constructed Response		2	CCSS.Math.Content.3.OA.D.9	Operations and Algebraic Thinking			0.97	0.49
49	Constructed Response		2	CCSS.Math.Content.3.NBT.A.3	Number and Operations in Base Ten			1.20	0.60
50	Constructed Response		3	CCSS.Math.Content.3.OA.A.3	Operations and Algebraic Thinking			1.80	0.60
51	Constructed Response		3	CCSS.Math.Content.3.MD.C.7d	Measurement and Data			0.90	0.30
52	Constructed Response		3	CCSS.Math.Content.3.OA.D.8	Operations and Algebraic Thinking			1.44	0.48

\*This item map is intended to identify the primary analytic skills necessary to successfully answer each question. However, some questions measure proficiencies described in multiple standards, including a balanced combination of procedural and conceptual understanding.

## **2-Point Holistic Rubric**

<b>2 Point</b>	A two-point response includes the correct solution to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task.  This response <ul style="list-style-type: none"><li>• indicates that the student has completed the task correctly, using mathematically sound procedures</li><li>• contains sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures</li><li>• may contain inconsequential errors that do not detract from the correct solution and the demonstration of a thorough understanding</li></ul>
<b>1 Point</b>	A one-point response demonstrates only a partial understanding of the mathematical concepts and/or procedures in the task.  This response <ul style="list-style-type: none"><li>• correctly addresses only some elements of the task</li><li>• may contain an incorrect solution but applies a mathematically appropriate process</li><li>• may contain the correct solution but required work is incomplete</li></ul>
<b>0 Point*</b>	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

\*Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

### **3-Point Holistic Rubric**

Score Points:

<b>3 Point</b>	A three-point response includes the correct solution(s) to the question and demonstrates a thorough understanding of the mathematical concepts and/or procedures in the task.  This response <ul style="list-style-type: none"><li>• indicates that the student has completed the task correctly, using mathematically sound procedures</li><li>• contains sufficient work to demonstrate a thorough understanding of the mathematical concepts and/or procedures</li><li>• may contain inconsequential errors that do not detract from the correct solution(s) and the demonstration of a thorough understanding</li></ul>
<b>2 Point</b>	A two-point response demonstrates a partial understanding of the mathematical concepts and/or procedures in the task.  This response <ul style="list-style-type: none"><li>• appropriately addresses most, but not all aspects of the task using mathematically sound procedures</li><li>• may contain an incorrect solution but provides sound procedures, reasoning, and/or explanations</li><li>• may reflect some minor misunderstanding of the underlying mathematical concepts and/or procedures</li></ul>
<b>1 Point</b>	A one-point response demonstrates only a limited understanding of the mathematical concepts and/or procedures in the task.  This response <ul style="list-style-type: none"><li>• may address some elements of the task correctly but reaches an inadequate solution and/or provides reasoning that is faulty or incomplete</li><li>• exhibits multiple flaws related to misunderstanding of important aspects of the task, misuse of mathematical procedures, or faulty mathematical reasoning</li><li>• reflects a lack of essential understanding of the underlying mathematical concepts</li><li>• may contain the correct solution(s) but required work is limited</li></ul>
<b>0 Point*</b>	A zero-point response is incorrect, irrelevant, incoherent, or contains a correct solution obtained using an obviously incorrect procedure. Although some elements may contain correct mathematical procedures, holistically they are not sufficient to demonstrate even a limited understanding of the mathematical concepts embodied in the task.

\*Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted).

## **2017 2- and 3-Point Mathematics Scoring Policies**

Below are the policies to be followed while scoring the mathematics tests for all grades:

1. If a student shows the work in other than a designated “Show your work” or “Explain” area, that work should still be scored.
2. If the question requires students to show their work, and the student shows appropriate work and clearly identifies a correct answer but fails to write that answer in the answer blank, the student should still receive full credit.
3. If students are directed to show work, a correct answer with **no** work shown receives **no** credit.
4. If students are **not** directed to show work, any work shown will **not** be scored. This applies to items that do **not** ask for any work and items that ask for work for one part and do **not** ask for work in another part.
5. If the student provides one legible response (and one response only), the rater should score the response, even if it has been crossed out.
6. If the student has written more than one response but has crossed some out, the rater should score only the response that has **not** been crossed out.
7. Trial-and-error responses are **not** subject to Scoring Policy #6 above, since crossing out is part of the trial-and-error process.
8. If a response shows repeated occurrences of the same conceptual error within a question, the conceptual error should **not** be considered more than once in gauging the demonstrated level of understanding.
9. In questions requiring number sentences, the number sentences must be written horizontally.
10. Condition Code A is applied whenever a student who is present for a test session leaves an entire constructed-response question in that session completely blank (no response attempted). This is not to be confused with a score of zero wherein the student does respond to part or all of the question but that work results in a score of zero.

## EXEMPLARY RESPONSE

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

*Answer*  $\underline{\frac{1}{4}}$  or any other fraction less than  $\frac{1}{3}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

*Answer*

Since  $\frac{1}{4}$  has a greater value in the denominator but the same numerator as  $\frac{1}{3}$

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the whole is divided into a greater number of parts, so each part is smaller.

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Or other valid response

---

## GUIDE PAPER 1

Additional

45

Write a fraction that is less than  $\frac{1}{2}$  using 1 as the numerator.

Answer

$\frac{1}{3}$



Explain why the answer you chose is less than  $\frac{1}{2}$ .

Answer

First I drew a congruent rectangle. Then I compared  $\frac{1}{3}$  and  $\frac{1}{2}$  and saw  $\frac{1}{3}$  is greater than  $\frac{1}{2}$ . Finally I know that  $\frac{1}{3}$  is less than  $\frac{1}{2}$ .

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen and the explanation is correct.

## GUIDE PAPER 2

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{4}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

If the numerators are the same, look at the denominator. The smaller the denominator the bigger the fraction.

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen as an answer. The response correctly compares denominators of fractions to explain the answer.

## GUIDE PAPER 3

45

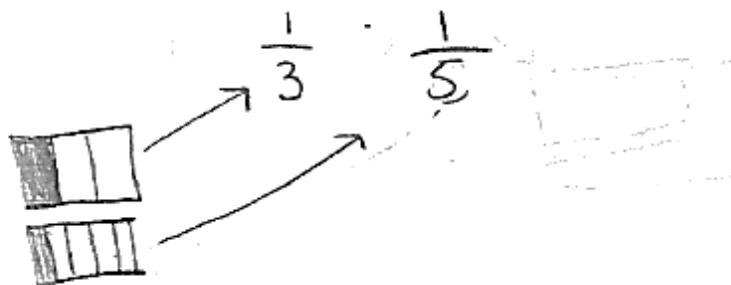
Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{5}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer As my fraction

I chose  $\frac{1}{5}$  because when I drew  $\frac{1}{3}$  and  $\frac{1}{5}$ . I saw that  $\frac{1}{3}$  had a piece bigger than all the 5 squares were small.



### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct fraction is chosen, and a correct comparison of fractions in terms of parts of the whole is provided.

## GUIDE PAPER 4

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{4}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

$\frac{1}{4}$  is smaller than  $\frac{1}{3}$

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the explanation is incomplete: no explanation of why  $\frac{1}{4}$  is less than  $\frac{1}{3}$  is provided. The response addresses only some elements of the task correctly.

## GUIDE PAPER 5

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{6}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

$\frac{1}{6}$  is bigger than  $\frac{1}{3}$  because the bigger the numerator the smaller the size.

### Score Point 1 (out of 2 points)

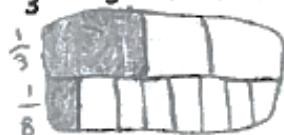
This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the explanation is incorrect. The response addresses only some elements of the task correctly.

## GUIDE PAPER 6

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{8}$



Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

First, I drew a congruent rectangle. Then, I split the rectangle into half. Finally, I shade the rectangle and saw  $\frac{1}{8}$  is greater than  $\frac{1}{3}$ .

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct fraction is chosen, the required work is incomplete: no explanation of why  $\frac{1}{8}$  is less than  $\frac{1}{3}$  is provided. The response addresses only some elements of the task correctly.

## GUIDE PAPER 7

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

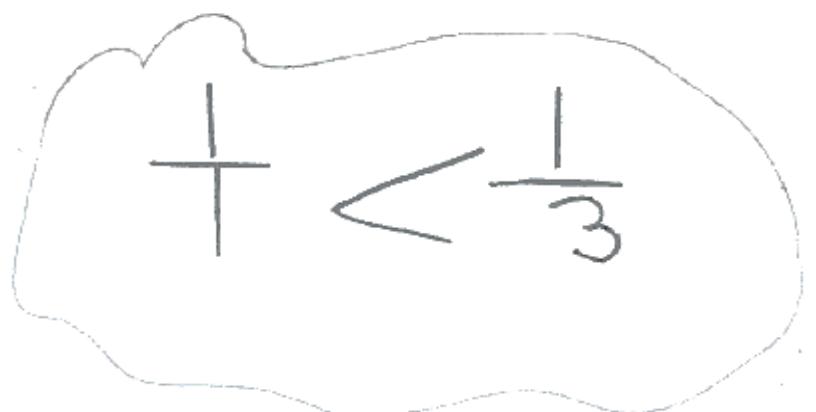
Answer

$$\frac{1}{1}$$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

$\frac{1}{1}$  is less than  $\frac{1}{3}$  because 3 is greater than 1.



### Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. A fraction greater than  $\frac{1}{3}$  is incorrectly chosen as an answer and an incorrect explanation is provided.

## GUIDE PAPER 8

Additional

45

Write a fraction that is less than  $\frac{1}{3}$  using 1 as the numerator.

Answer  $\frac{1}{2}$

Explain why the answer you chose is less than  $\frac{1}{3}$ .

Answer

$\frac{1}{2}$  is less than  $\frac{1}{3}$  because 3  
is greater than 2.

### Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.

## EXEMPLARY RESPONSE

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

*Show your work.*

$$40 \times 3 = 120$$

or

$$40 + 40 + 40 = 120$$

Or other valid process

*Answer* 120 grams

## GUIDE PAPER 1

Additional

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$40 \times 3 = A$$

$$A = 40 \times 3$$

$$A = 120$$



$$3 \times 4 = 12$$
$$3 \times 40 = 120$$

Answer 120 grams

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The total mass of the bag of marbles is correctly determined using a mathematically sound procedure.

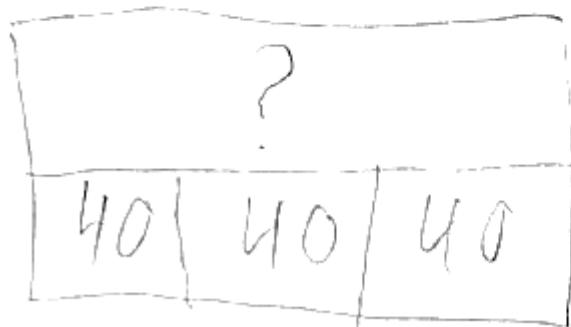
## GUIDE PAPER 2

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$40 \times 3 = ?$$
$$? = 120$$



Answer 120 grams

the total mass  
is 120 grams

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the total mass of the bag of marbles.

## GUIDE PAPER 3

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$\begin{array}{r} 40 \\ + 40 \\ \hline 120 \end{array}$$

Answer 120 grams

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure of repeated addition is applied to determine the correct solution.

## GUIDE PAPER 4

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$40 \times 3 = 70$$

The total mass of marbles in each bag is 70.

Answer 70 grams

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct process is followed, the solution is incorrect. The response correctly addresses only some elements of the task.

## GUIDE PAPER 5

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$\begin{array}{r} 3 \times 40 = \\ (2 \times 40) + (1 \times 40) = 160 \\ 80 + 80 = 160 \\ \hline 160 \end{array}$$

Answer 160 grams

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the work contains a correct multiplication procedure, a calculation error ( $1 \times 40$ ) results in an incorrect answer. The response contains an incorrect solution but applies a mathematically appropriate process.

## GUIDE PAPER 6

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

$$\begin{array}{r} 40 \\ + 40 \\ + 40 \\ + 40 \\ \hline 160 \end{array}$$

160 grams

Answer 160 grams

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. A procedure of repeated addition is followed to determine the solution; however, the extra addition of another 40 marbles results in an incorrect total mass of the bag of marbles. The response contains an incorrect solution but applies a mathematically appropriate process.

## GUIDE PAPER 7

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

40m<sup>3</sup>n a bag 3grams

3,6,9,12,15,18,21,24,27,30,33,  
36,39<sup>40</sup>

Answer 14 grams

### Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The work shows counting by three's and suggests no understanding.

## GUIDE PAPER 8

Additional

46

Patti puts 40 marbles in a bag. Each marble has a mass of 3 grams. What is the total mass of the bag of marbles?

Show your work.

40	40	40
40	80	140

$$\begin{array}{r} 140 \\ + 40 \\ \hline 180 \end{array} \qquad \begin{array}{r} 180 \\ + 3 \\ \hline 193 \end{array}$$
  
$$\begin{array}{r} 180 \\ - 193 \\ \hline 197 \end{array}$$

The total of Patti is 97 Grams  
because each Marble have 40 in each grams

Answer 97 grams

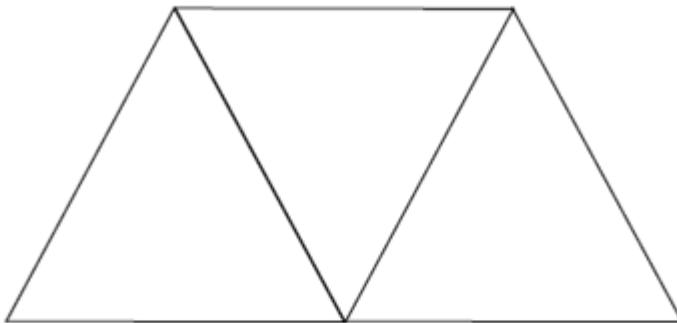
### Score Point 0 (out of 2 points)

Although the response has three groups of 40, holistically, this is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. Extra additions and subtraction show no understanding of the process.

## EXEMPLARY RESPONSE

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

$\frac{1}{3}$

Answer \_\_\_\_\_

*Explain how you know your answer is correct.*

The whole shape is divided into three triangles of the same size,

so one of them is  $\frac{1}{3}$ .

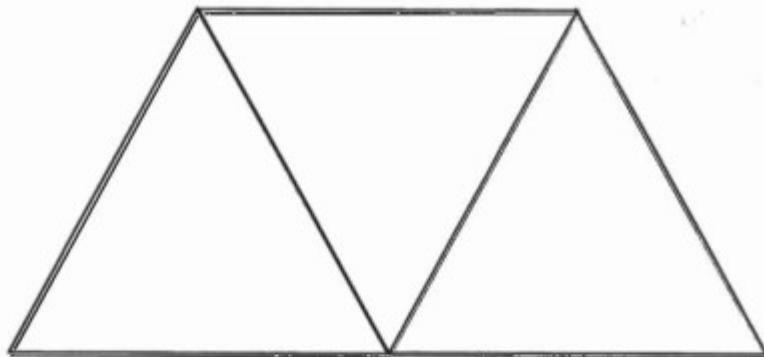
Or other valid response.

## GUIDE PAPER 1

Additional

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{1}{3}$

Explain how you know your answer is correct.

I know my answer is correct because this trapezoid is cut into thirds and I think that each of them are ~~one~~ one third.

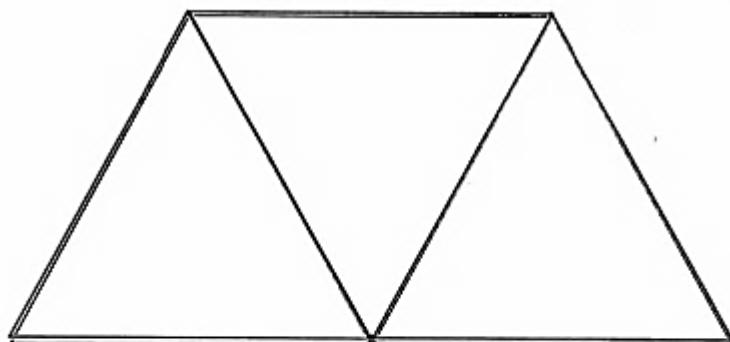
### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The fraction is identified correctly and a correct explanation is provided.

## GUIDE PAPER 2

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{1}{3}$

Explain how you know your answer is correct.

I know my answer is correct because

$\frac{1}{3} + \frac{1}{3} + \frac{1}{3} = \frac{3}{3}$  and  $\frac{3}{3}$  is a whole.

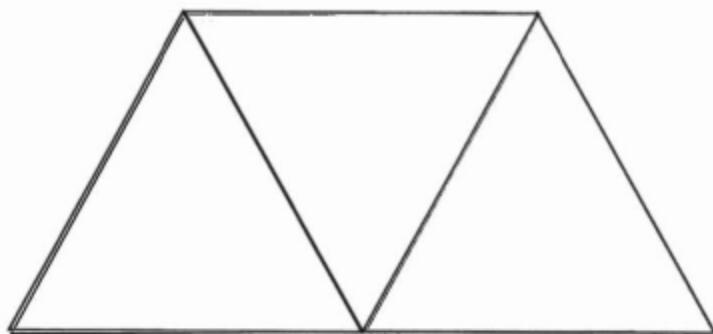
### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct answer and explanation are provided.

## GUIDE PAPER 3

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{1}{3}$

Explain how you know your answer is correct.

There are three parts and  
one part is  $\frac{1}{3}$ .

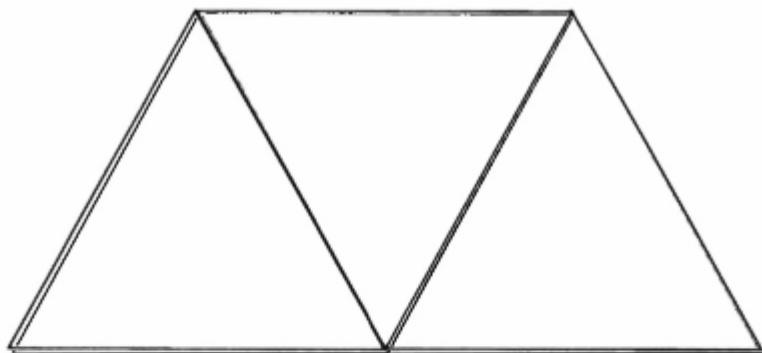
### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The fraction is identified correctly and a correct explanation is provided.

## GUIDE PAPER 4

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer 3

Explain how you know your answer is correct.

One triangle is  $\frac{1}{3}$ , so three is  $\frac{3}{3}$ .

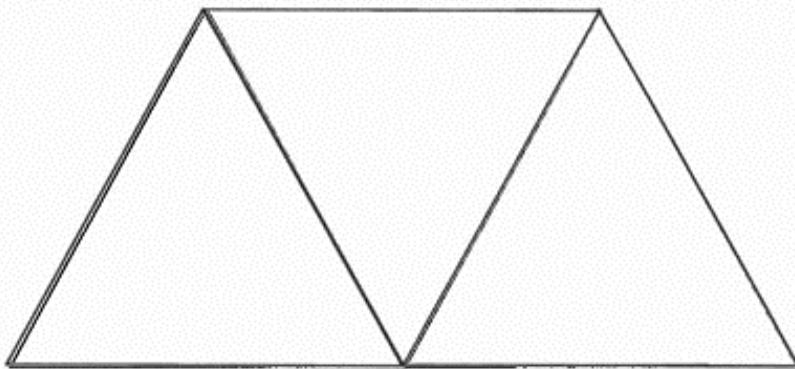
### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the response contains a correct explanation, the answer is incorrect. The response addresses only some elements of the task correctly.

## GUIDE PAPER 5

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{3}{3}$

*Explain how you know your answer is correct.*

I know because there are 3 triangles  
and they were put together and  
 $\frac{3}{3}$  is = to 1 hole.

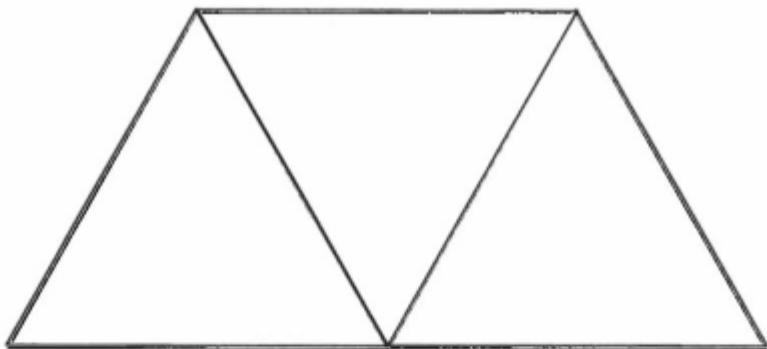
### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The work correctly identifies thirds; however, the answer is incorrect. The response addresses only some elements of the task correctly.

## GUIDE PAPER 6

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{1}{3}$

Explain how you know your answer is correct.

I know it is correct because 1 triangl has  
3 sides So it is  $\frac{1}{3}$ .

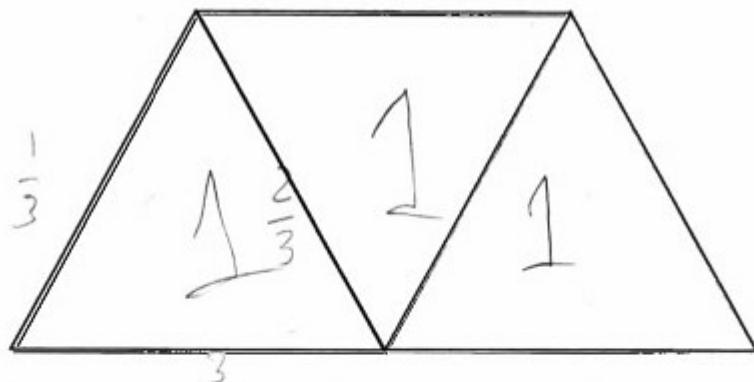
### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the fraction is identified correctly, the explanation is faulty. The response addresses only some elements of the task correctly.

## GUIDE PAPER 7

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer 1

Explain how you know your answer is correct.

I know it correct because  
1 triangle is one whole

### Score Point 0 (out of 2 points)

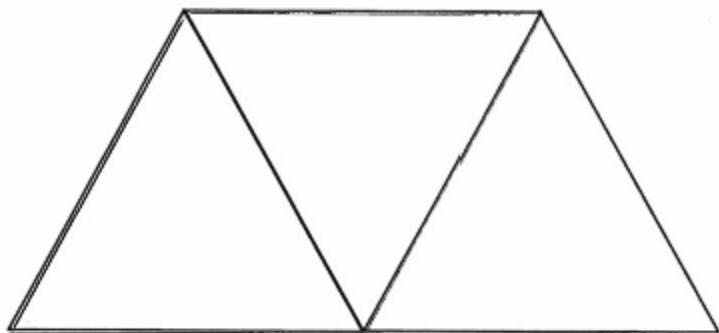
Although the work contains correct fractions  $\frac{1}{3}$ ,  $\frac{2}{3}$ ,  $\frac{3}{3}$ , holistically the response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.

## GUIDE PAPER 8

Additional

47

Ved drew the shape below by combining exactly three triangles of the same size and shape.



What fraction of the area of the whole shape is each triangle?

Answer  $\frac{2}{3}$

*Explain how you know your answer is correct.*

My answer is correct because I  
Counted 2 triangles that are the  
Same

### Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The answer and explanation are incorrect.

## EXEMPLARY RESPONSE

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

Yes, the product of an even or odd number and an even number will always be  
an even number.

Or other valid response

## GUIDE PAPER 1

Additional

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

Leslie is correct because any number multiplied with an even number should equal an even product.

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct pattern is established to support the answer.

## GUIDE PAPER 2

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

Yes because even $\times$ even=even, even $\times$ odd=even and odd $\times$ odd=odd.

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct pattern is established to support the answer.

## GUIDE PAPER 3

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

yes because 5 times 2,4,6,8,10,12, and 14 all produce an even number

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The work contains multiple correct examples to support the answer. The response contains sufficient work to demonstrate a thorough understanding.

## GUIDE PAPER 4

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

Yes Leslie is correct because I did this( $5 \times 4 = 20$ )when i did it I got a even number 20

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although the statement is correct, only one example of multiplication by an even number is provided. The response does not contain sufficient work to establish a thorough understanding.

## GUIDE PAPER 5

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

Yes because  $5 \times 4 = 20$  and  $5 \times$  anything = 5 or 10 and 10 is for even numbers but odd and even is odd and even and even is even. So, yes.

### Score Point 1 (out of 2 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The work suggests understanding of multiplication patterns; however, the statement about the product of odd and even numbers is incorrect. The response addresses only some elements of the task correctly.

## GUIDE PAPER 6

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

$$5 \times 8 = 40 \quad 5 \times 4 = 20$$

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Two correct examples of multiplication by an even number are provided; however, the response does not draw a conclusion. The response correctly addresses only some elements of the task.

## GUIDE PAPER 7

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

no because  $5 \times 1 = 5$  and that is not even that is why Leslie is wrong

### Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The response misinterprets the question and multiplies 5 by an odd rather than an even number, and an incorrect conclusion is drawn.

## GUIDE PAPER 8

Additional

48

Leslie says that 5 multiplied by an even number always results in an even product. Is Leslie's statement correct?

*Explain your answer.*

she is correct because i did  $5 \times 4 = 20$  and 2 is an even number but she is also incorrect because 6 is an even number and  $5 \times 6 = 30$  and 3 is not an even product.

### Score Point 0 (out of 2 points)

Although the work contains correct examples of multiplication by an even number, the procedure of looking at the first digit of the number to determine if it is an even or odd number shows no understanding. Holistically, this response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

## EXEMPLARY RESPONSE

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

---

Andy may have added 70 and 5 and got 75 when he should have multiplied 70 and 5.

---

Or other valid response

---

What is the total number of balloons Mrs. Ruiz bought?

**Show your work.**

$$5 \times 70 = 350$$

Or other valid response

**Answer** 350 balloons

## GUIDE PAPER 1

Additional

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

Andy added instead of using multiplication.

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\begin{array}{r} 70 \\ \times 5 \\ \hline 350 \text{ balloons} \end{array}$$

Answer 350 balloons

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and a correct procedure is applied to determine the total number of balloons.

## GUIDE PAPER 2

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

The error <sup>Andy made was</sup> Andy did not multiply  $5 \times 70$ . He multiplied  $5 \times 15$  which equals 75 which was his answer.

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\textcircled{70} \textcircled{70} \textcircled{70} \textcircled{70} \textcircled{70}$$

$$5 \times 70 = 350$$

Answer 350 balloons

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and a correct procedure is followed to determine the solution.

## GUIDE PAPER 3

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

The error Andy made was each bag had seventy balloons. He did plus five instead of times five so he got the incorrect answer of balloons.

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\begin{array}{r} \times 5 \\ 70 \\ \hline 350 \\ \hline 350 \end{array}$$

Answer 350 balloons

### Score Point 2 (out of 2 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The error is correctly explained and the total number of balloons is correctly calculated.

## GUIDE PAPER 4

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

Andy is wrong because he  
said it was 75 when she brought  
in 70. *(Handwritten note: 70 + 70 = 140)*

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$7 \times 5 = 35$$

$$70 \times 5 = 350$$

Answer 350 balloons

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. Although a correct procedure is followed to determine the solution, the explanation is incorrect. The response addresses only some elements of the task correctly.

## GUIDE PAPER 5

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

Andy messed up by adding. He added instead of multiplying. I know this because  $70+5=75$ , which is his answer.

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\begin{array}{r} 2 \\ \times 75 \\ \hline 145 \text{ balloons} \end{array}$$

Answer 145 balloons

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The explanation is correct; however, an incorrect number of balloons per bag is used to determine the solution and the solution has a calculation error. The response contains an incorrect solution but applies a mathematically appropriate process.

## GUIDE PAPER 6

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

the error that andy did was she did  $70+5$  not  
 $70 \times 5!$

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\begin{array}{r} 75 \\ \times 5 \\ \hline 375 \\ + 75 \\ \hline 450 \end{array}$$

Answer 450 balloons

### Score Point 1 (out of 2 points)

This response demonstrates only a partial understanding of the mathematical concepts in the task. The error is explained correctly; however, the work is incorrect: 75 balloons is multiplied by the number of bags, and then an extra addition operation is performed. The response addresses only some elements of the task correctly.

## GUIDE PAPER 7

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

What error did Andy make when calculating the total number of balloons?

All you have to do is add 5, 70, and 75 and you will get 150 as your answer.

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$\begin{array}{r} 15 \\ 70 \\ 75 \\ \hline 150 \text{ balloons} \end{array}$$

Answer 150 balloons

**Score Point 0 (out of 2 points)**

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation and work are incorrect.

## GUIDE PAPER 8

Additional

49

Mrs. Ruiz bought 5 bags of balloons for a party. Each bag contained 70 balloons. Andy said Mrs. Ruiz bought a total of 75 balloons. Andy is incorrect.

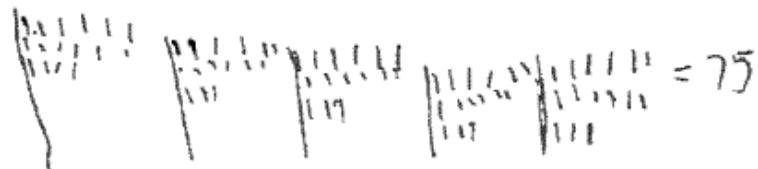
What error did Andy make when calculating the total number of balloons?

She bought 5 bags for a party. And each bag contained 70 balloons. So  $75 \div 5 = 15$ .

What is the total number of balloons Mrs. Ruiz bought?

Show your work.

$$75 \div 5 = 15$$



Answer 15 balloons

Score Point 0 (out of 2 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation and work are incorrect.

## EXEMPLARY RESPONSE

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*

$$36 \div 6 = 6 \text{ band members in each row}$$

Or other valid response

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

No, because 7 is not a factor of 36.

---

Or other valid response

---

---

## GUIDE PAPER 1

Additional

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

$$\begin{array}{r} 36 \\ \div 6 \\ \hline 6 \end{array}$$
$$\begin{array}{r} 6 \\ \times 6 \\ \hline 36 \end{array}$$

There are six in each row.

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

NO! It can not go into 7 equal rows because you can't go over 36, so there will be a remainder.

$$7 \overline{)36} \quad \begin{matrix} 5 \\ r1 \end{matrix}$$

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The number of band members in each row is correctly calculated. The explanation is complete and correct.

## GUIDE PAPER 2

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.



0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0

$$36 \div 6 = 6$$

There are  
6 band members  
in each row.

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No as you can see 36 members  
can't be in 7 rows because no  
matter how you put it  $36 \div 7 = \text{impos}$

0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0



0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0  
0 0 0 0 0

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct procedure is followed to determine the number of band members per row. Two tables are created to correctly show that it is not possible to place band members in 7 equal rows.

## GUIDE PAPER 3

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

$$\begin{array}{ccccccc} & 1 & 2 & 3 & 4 & 5 & 6 \\ \hline 6 & | & 6 & | & 6 & | & 6 & | & 6 & = 36 \end{array}$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No, because if you try to divide 7 equal, you don't get 36. 7, 14, 21, 28, 35, 42.

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct chart is drawn to identify the number of band members in each row. The explanation assumes the same number of people per row ( $6 \times 7 = 42$ ) and is correct.

## GUIDE PAPER 4

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*

$$36 \div 6 = 6$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

No, because you can only do it by  
6's and 4's.

### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The number of band members in each row is correctly calculated. The explanation only covers 4, 6, and 9 as factors of 36 and is not complete to establish a thorough understanding. The response appropriately addresses most, but not all aspects of the task.

## GUIDE PAPER 5

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*

$$6 \times 6 = 36$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

No they can not because  
the rows will not be  
equal

### Score Point 2 (out of 3 points)

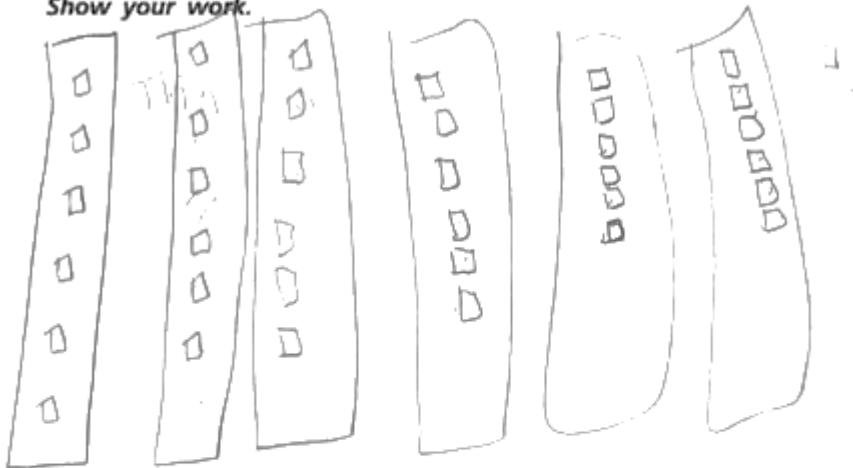
This response demonstrates a partial understanding of the mathematical concepts in the task. The number of band members in each row is correctly determined; however, the explanation is incomplete. The response addresses most but not all aspects of the task.

## GUIDE PAPER 6

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*



Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

It could not be 7 because then the  
rows will have new people and there  
will not be 36 people.

### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The chart correctly represents the number of band members in each row; however, the explanation is weak and reflects some misunderstanding. The response addresses most but not all aspects of the task.

## GUIDE PAPER 7

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

Answer:

6 band  
members

$$36 \div 6 = 6$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No, because  $36 \div 7 = \text{NOTHING!}$

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation is faulty. The response addresses some elements of the task correctly but reflects a lack of essential understanding of how to divide with a remainder.

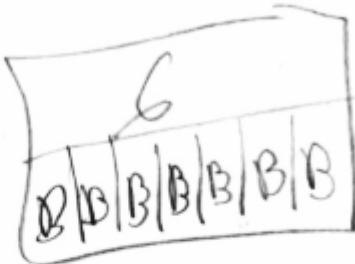
## GUIDE PAPER 8

Additional

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.



$$36 \div 6 = 6$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No.

There are  
6 band members

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation to the second question is not provided. The response addresses some elements of the task correctly but required work is limited.

## GUIDE PAPER 9

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

$$36 \div 6 = 6$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No it can not becas  $6 \times 6 = 36$   
and  $36 \neq 6 \times 7$ .

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a correct procedure is followed to calculate the number of band members in each row, the explanation is limited to repeating the previous work. The response addresses only some elements of the task correctly but the required work is limited.

## GUIDE PAPER 10

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

*Show your work.*

$$\begin{array}{r} 36 \\ - 6 \\ \hline 30 \end{array}$$

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

*Explain your answer.*

yes they can because  $36 \div 7 = 43$   
and that how they do it.

### Score Point 0 (out of 3 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The work is incorrect and reflects no understanding.

## GUIDE PAPER 11

Additional

50

A band has 36 members. They are arranged into 6 equal rows. How many band members are in each row?

Show your work.

$$6 \div 36 = 4$$

4 members in each row,

Can the same 36 band members be placed into exactly 7 equal rows? Why or why not?

Explain your answer.

No because there would  
be no one to fill the 7 row.

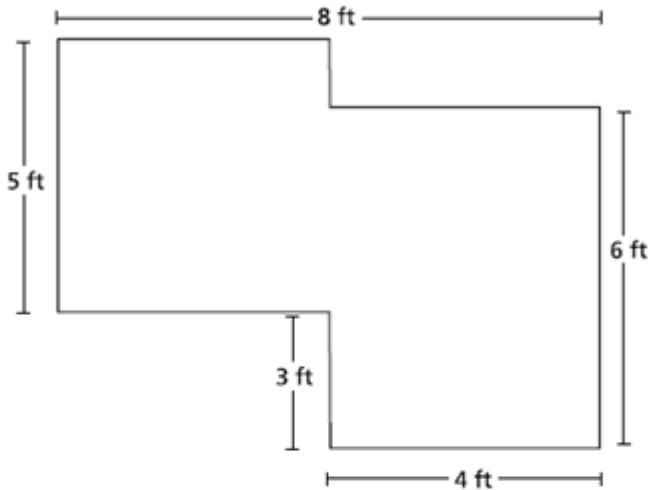
### Score Point 0 (out of 3 points)

Although a division operation is applied to determine the solution, the division is written in reverse order, and is incorrect. Holistically, the work is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

## EXEMPLARY RESPONSE

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

The gardener can divide the yard in two rectangles, find the area of each rectangle and add the two areas.

$$(5 \times 4) + (6 \times 4) = 20 + 24 = 44 \text{ Or other valid response}$$

What is the total area of the new lawn?

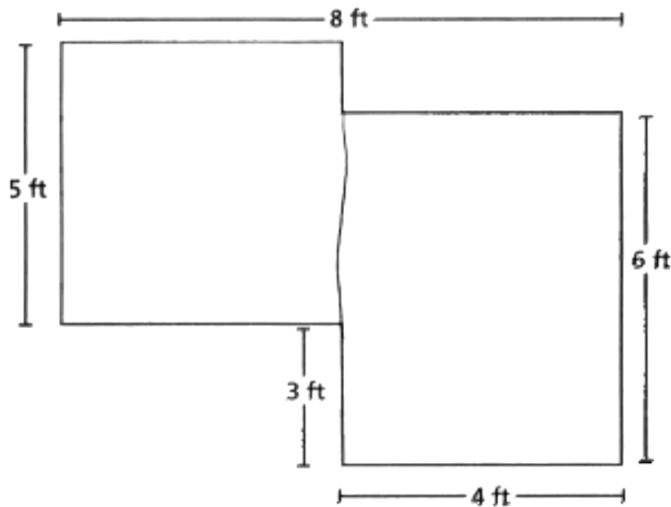
Answer 44 square feet

## GUIDE PAPER 1

Additional

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

She can find it

by adding  $(5 \times 4) + (6 \times 4) = \text{Answer } 44$

What is the total area of the new lawn?

Answer 44 square feet

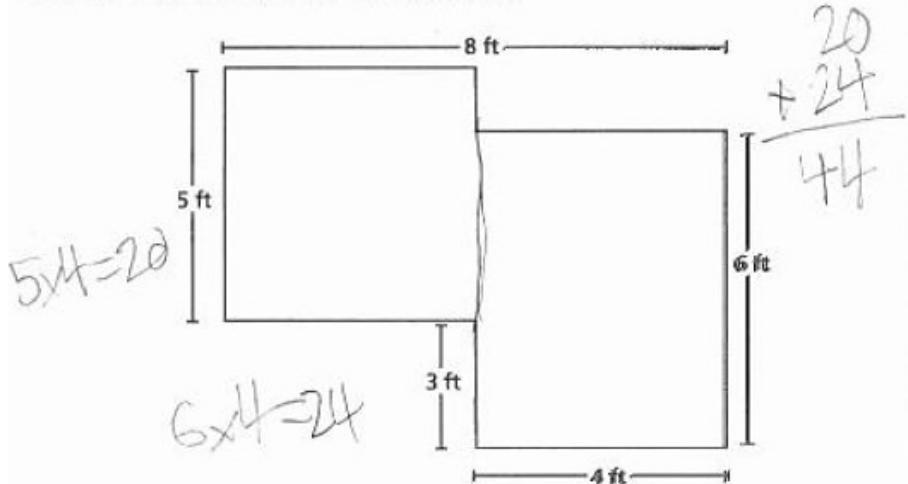
### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The area of each part of the yard is correctly calculated and then two areas are added to determine the total area of the new lawn. The explanation of the process is complete and correct.

## GUIDE PAPER 2

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

She can make the lawn into two pieces and multiply that to find the total then add the two pieces

What is the total area of the new lawn?

Answer 44 square feet

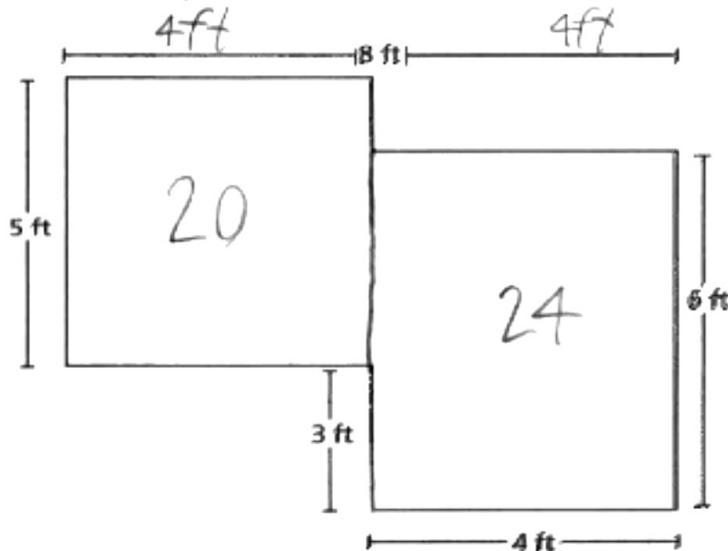
### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. A correct process of dividing the yard in two parts and calculating the area of each and then adding the two areas is described and all calculations are correct.

## GUIDE PAPER 3

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

On the top it says 8 ft if you cut it in the middle it is 4 ft on both sides take the left side and it makes 20 the right side makes 24,  $24 + 20 = 44$ .  
What is the total area of the new lawn?

Answer 44 square feet

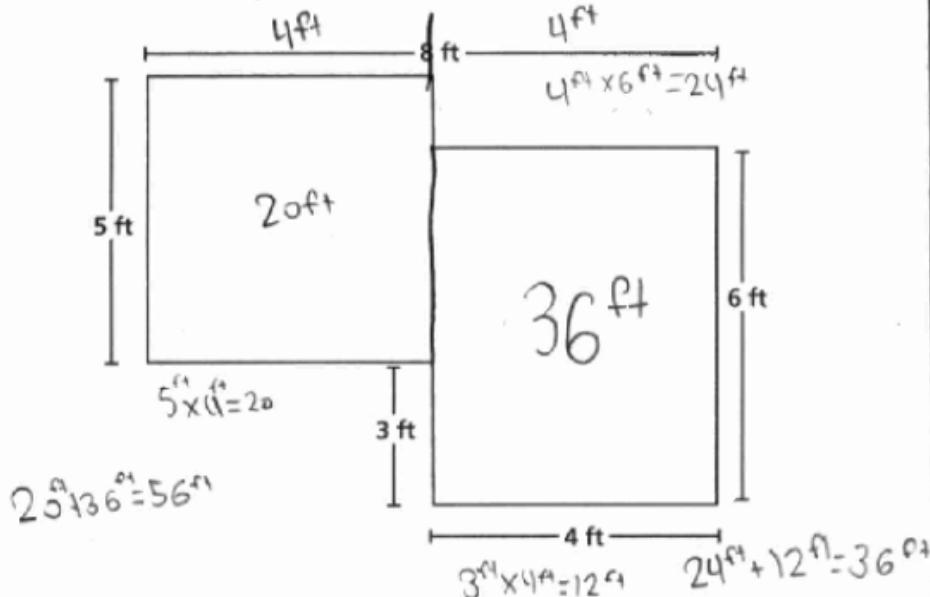
### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The explanation of the process and all calculations are correct.

## GUIDE PAPER 4

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

She can first split the shape into a square and a rectangle. Then she can split the 8 ft in to 4 and 4. Then she can do  $5 \times 4 = 20$ . She can do  $4 \times 6 = 24$ . Then do  $3 \times 4 = 12$ . Then do  $12 + 24 = 36$ . Then do  $20 + 36 = 56$ .

What is the total area of the new lawn?

Answer 56 square feet

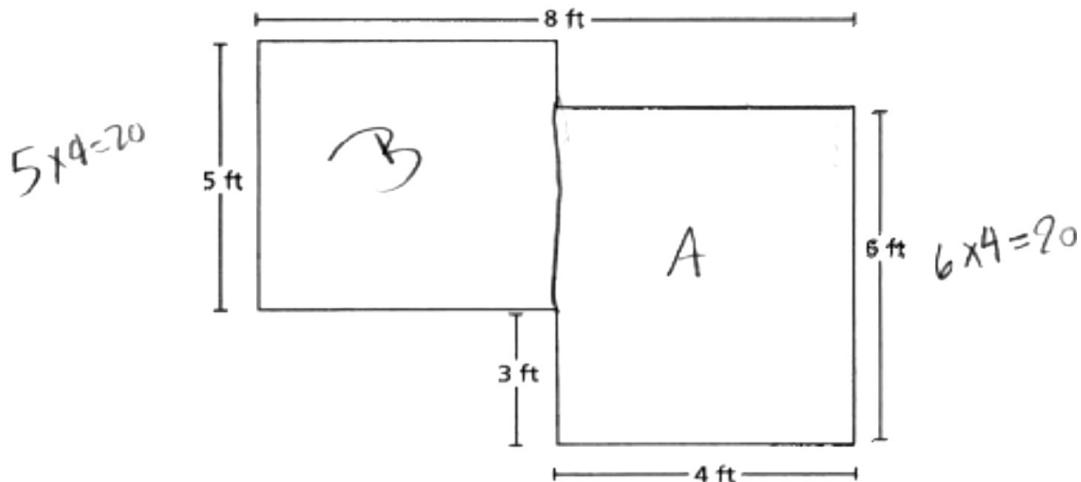
### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is split in two parts and the area of one part is correctly calculated. The  $3 \times 4$  area is inappropriately added twice when determining the area of the second part of the yard. The calculated areas are correctly added to determine the solution. The response appropriately addresses most but not all aspects of the task.

## GUIDE PAPER 5

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

The gardener can find it is by splitting it in to two pieces and then multiply the two pieces. last add.

What is the total area of the new lawn?

Answer 10 square feet

$$\begin{array}{r} 20 \\ + 20 \\ \hline 40 \end{array}$$

10 sq. feet

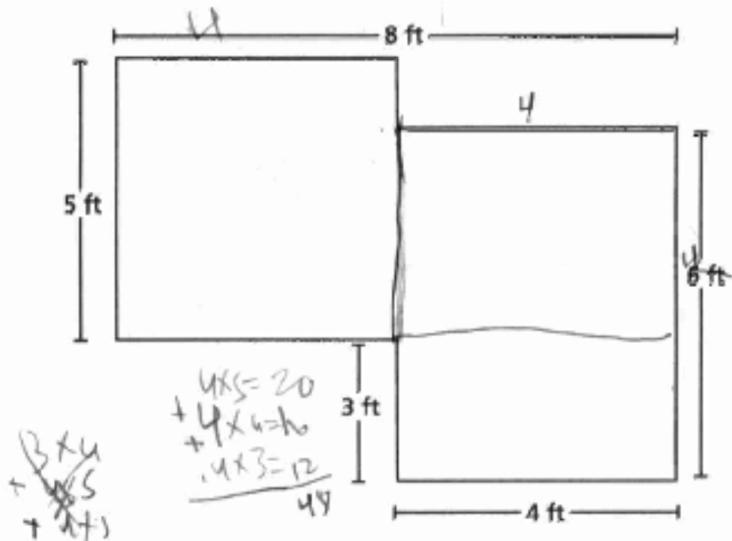
### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is split in two parts and area B is calculated correctly; however, a calculation error when determining area A results in an incorrect answer for area A and final solution. The response reflects some minor misunderstanding of the underlying mathematical concepts and procedures.

## GUIDE PAPER 6

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

he can split his garden up and find it.

What is the total area of the new lawn?

Answer 48 square feet

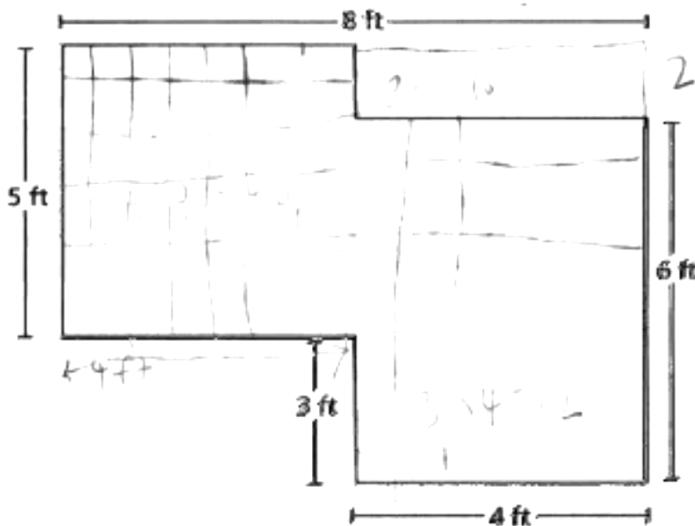
### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. The yard is divided in three parts, and areas of two parts are calculated correctly. The height of the middle rectangle is incorrectly determined as 4 rather than 3, resulting in an incorrect area and final solution. The response contains an incorrect solution but provides sound procedure and reflects some minor misunderstanding.

## GUIDE PAPER 7

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

$3 \times 4 = 12$     $8 \times 5 = 40$     $8 \times 8 = 64$  Then we add  
the number together.  $64 + 40 + 12 = 94$ .  $2 \times 8 = 16$   
 $94 - 16 = 88$

What is the total area of the new lawn?

Answer 98 square feet

### Score Point 1 (out of 3 points)

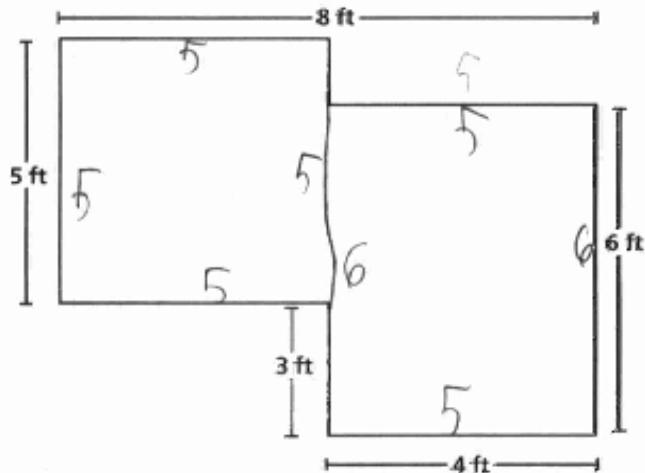
This response demonstrates only a limited understanding of the mathematical concepts in the task. The area of four different rectangles is correctly calculated; however, additional work of adding and subtracting the areas exhibits multiple flaws and reflects a lack of essential understanding. The response addresses only some elements of the task correctly.

## GUIDE PAPER 8

Additional

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

She can break it apart with a line as I showed. Then she can multiply  
 $5 \times 6 + 5 \times 6$  which equals  $30 + 30$  which  
equals 60 so the area of that part is 60 ft.  
What is the total area of the new lawn? Multiply  $4 \times 5 = 20$  and add  $20 + 60 = 80$ .  
The total area is  
80 sq. ft.

Answer 80 square feet

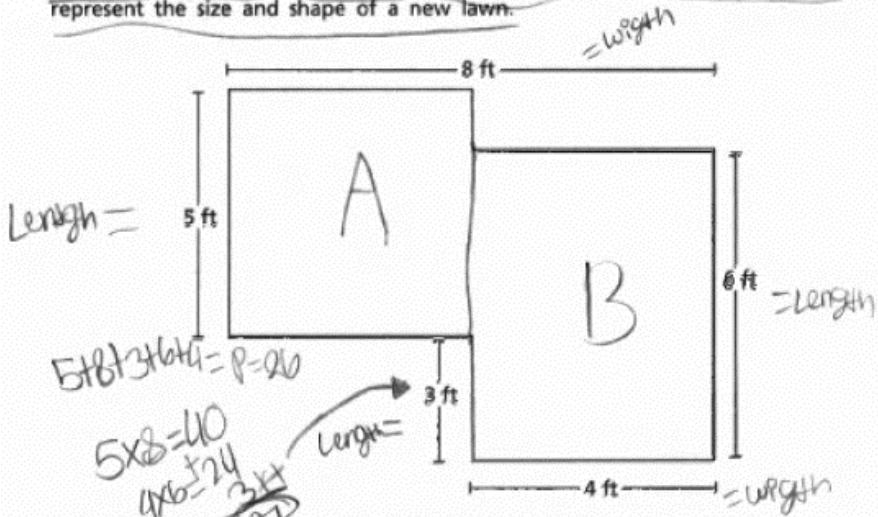
### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although a process of dividing the yard in smaller parts, calculating the area of each and adding areas is described, the work exhibits multiple flaws when determining dimensions and area of rectangles and reflects a lack of essential understanding. The response addresses only some elements of the task correctly.

## GUIDE PAPER 9

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

I can find the total area of the new lawn by putting Length x width  
the length was 6 of part A and  
the width was 8 =  $5 \times 8 = 40$  then shape  
What is the total area of the new lawn?

Answer 67 square feet

B the length was  
and the width was  
 $4 \times 6 = 24$  so  
I did  
 $40 + 24 = 64$

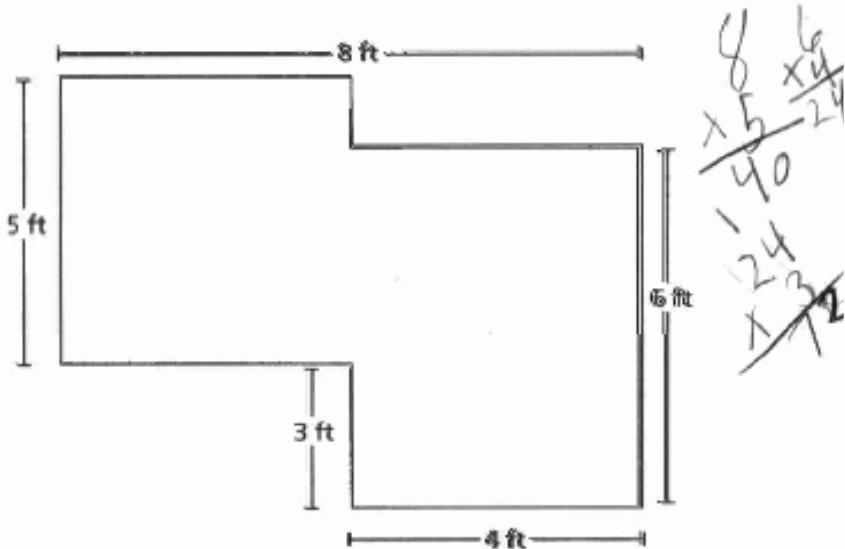
### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Area B is calculated correctly; however, the width of rectangle A is determined incorrectly resulting in an incorrect solution for area A. Additionally, the value 3 is incorrectly added to areas A and B when calculating the total area. The response addresses only some elements of the task correctly and reflects a lack of essential understanding.

## GUIDE PAPER 10

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

72, because if you multiply  
24 x 3 = 72.

What is the total area of the new lawn?

Answer 72 square feet

### Score Point 0 (out of 3 points)

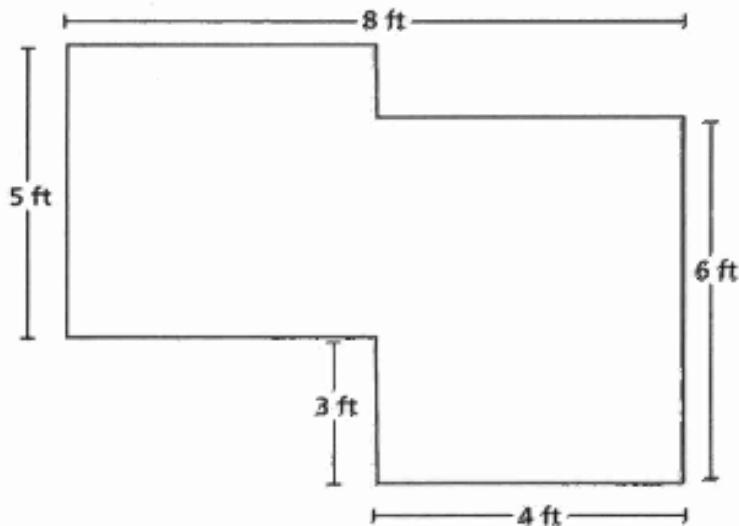
Although the work contains correct calculations of  $6 \times 4$  area, the response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation is faulty and suggests no understanding.

## GUIDE PAPER 11

Additional

51

A gardener is drawing plans for a new yard. She creates the picture below to represent the size and shape of a new lawn.



How can the gardener find the total area of the new lawn? Describe the process she can use.

She can use the formula for her new lawn.

What is the total area of the new lawn?

Answer 8 square feet

### Score Point 0 (out of 3 points)

This response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task. The explanation is faulty and suggests no understanding.

## EXEMPLARY RESPONSE

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$\begin{aligned} \text{Ms. Amani's cost of supplies} &= \text{cost of pencils} + \text{cost of folders} \\ \text{cost of supplies} &= (7 \times 3) + (9 \times 2) = 21 + 18 = 39 \end{aligned}$$

$$\begin{aligned} \text{Mr. Blake's cost of supplies} &= \text{cost of crayons} \\ \text{cost of supplies} &= 9 \times 4 = 36 \end{aligned}$$

$$\text{Difference in cost} = 39 - 36 = 3$$

Or other valid process

*Difference in cost \$* 3

## GUIDE PAPER 1

Additional

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

Mr. Blake's cost

$$\$4 \times 9 = 36$$

Ms. Amani's cost

$$\$3 \times 7 = 21$$

$$\$2 \times 9 = 18$$

$$21 + 18 = 39$$

$$\begin{array}{r} 39 \\ - 36 \\ \hline 3 \end{array}$$

Difference in cost \$ 3

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated using mathematically sound procedures.

## GUIDE PAPER 2

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$7 \times 3 = 21 \quad 9 \times 2 = 18$$

$$\text{mr.blake} \quad 9 \times 4 = 3$$

$$39 - 36 = 3$$

$$21 + 18 = 39$$

ms.Amani

**Difference in cost \$**

3

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated using mathematically sound procedures. The incorrect work shown ( $9 \times 4 = 3$ ) in the initial work for Mr. Blake's classroom cost is considered an inconsequential error that does not detract from the correct solution and the demonstration of a thorough understanding.

## GUIDE PAPER 3

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$\begin{aligned} \text{ms .Amani} & 3*7=21 \quad 9*2=18 \quad 21+18=39\$ \\ \text{mr.blake} & 9*4=36\$ \end{aligned}$$

*Difference in cost \$*

3\$

### Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The cost of each room's supplies and the difference in cost are correctly calculated. The subtraction to calculate the difference in cost is performed mentally and is acceptable.

## GUIDE PAPER 4

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

Ms Amani

$$3+3+3+3+3+3+3+3+3=39$$

Mr Blake

$$4+4+4+4+4+4+4+4+4=36$$

Difference in cost \$ Ms Amani  
Buy 39 and Mr Blake  
Buy 36

### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. A correct process of repeated addition is applied to calculate the cost of supplies for each classroom; however, the difference in cost is not addressed. The response addresses most, but not all aspects of the task using mathematically sound procedures.

## GUIDE PAPER 5

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

$$\begin{array}{r} 7 \times 3 = 21 \\ 9 \times 2 = 18 \\ \hline 39 \end{array}$$

$$\begin{array}{r} 9 \times 4 = 36 \\ \text{Ms Blake} \end{array}$$

MS Amani

The Difference is that Ms Amani ordered  
More things than Ms Blake and the cost.

Difference in cost \$ 21 - 18 = 3

### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. Although the cost of each room's supplies is correctly determined, the difference in cost is not calculated. The response addresses most, but not all aspects of the task.

## GUIDE PAPER 6

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$\begin{aligned} 6 \times 3 &= 18 \\ 9 \times 2 &= 18 \end{aligned}$$

$$9 \times 4 = \$36$$

\$36

*Difference in cost \$*

0

### Score Point 2 (out of 3 points)

This response demonstrates a partial understanding of the mathematical concepts in the task. Mr. Blake's classroom cost is correctly determined; however, an incorrect number of pencil cases is used to determine the cost of pencils, resulting in incorrect total cost for Ms. Amani's classroom. The difference in costs is then calculated correctly. The response contains an incorrect solution but provides sound procedures.

## GUIDE PAPER 7

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

The student has handwritten work showing calculations for supply costs. At the top, there is a multiplication problem  $3 \times 7 + 9 \times 2 = 39$ . Below this, two circles contain the numbers 21 and 18, which are likely intermediate steps or answers. Arrows point from these numbers down to a final addition calculation in a circle:  $(\frac{21}{+} \frac{18}{\hline}) = 39$ . To the left of this, the text "Difference in cost \$ 39" is written.

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although the cost of supplies Ms. Amani ordered is correctly calculated and supported with work, the cost of Mr. Blake's supplies and the difference in cost is not determined. The response addresses some elements of the task correctly but required work is limited.

## GUIDE PAPER 8

Additional

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

**Show your work.**

$$7 \times 3 = 21 \quad 9 \times 2 = 18 \quad 21 - 18 = 3$$

**Difference in cost \$**

3

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Only the costs of supplies Ms. Amani ordered is calculated and the difference in cost of these supplies is determined. The response addresses some elements of the task correctly but reflects a lack of essential understanding.

## GUIDE PAPER 9

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$\$39 - \$36 = \$3$$

*Difference in cost \$3*

### Score Point 1 (out of 3 points)

This response demonstrates only a limited understanding of the mathematical concepts in the task. Although the difference in cost is calculated correctly, no initial work is shown for how 36 and 39 are obtained. The response contains a correct solution but required work is limited.

## GUIDE PAPER 10

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

Show your work.

$$\begin{array}{r} 7 \quad 3 \quad 9 \\ \times 4 \quad \times 2 \\ \hline 28 \quad 18 \\ + 56 \quad + 18 \\ \hline 55 \quad 36 \end{array}$$



Difference in cost \$55

### Score Point 0 (out of 3 points)

Although the cost of folders is correctly calculated, additional work to calculate cost of supplies suggests no understanding; cases are multiplied by packs and dollars are multiplied by dollars. Holistically, this response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.

## GUIDE PAPER 11

Additional

52

Ms. Amani and Mr. Blake each ordered supplies for their classrooms. The cost of the supplies is shown below.

### CLASSROOM SUPPLIES

Supply	Cost
Pencil Case	\$3
Box of Crayons	\$4
Pack of Folders	\$2

Ms. Amani ordered 7 pencil cases and 9 packs of folders. Mr. Blake ordered 9 boxes of crayons. What is the difference in the cost of the supplies Ms. Amani ordered and the cost of the supplies Mr. Blake ordered?

*Show your work.*

$$3+3+3+3+3+3+3=18$$

*Difference in cost \$* 18

### Score Point 0 (out of 3 points)

Although an attempt is made to determine the cost of pencil cases, the repeated addition is performed incorrectly, and no other work is provided. The response is not sufficient to demonstrate even a limited understanding of the mathematical concepts in the task.