1. Hector is buying books at a bookstore.

Part A

He buys 2 used books and 1 new book for $26. The new book costs $18. Each used book costs the same amount. What is the price of each used book?

$4

Part B

Hector also buys a reading light for $12 and 2 journals for $8 each to give as gifts. How much does Hector spend?

Hector spends $28 on gifts.

2. There are 165 cars in the parking lot. Complete the chart to show 165 rounded to the nearest 10.

Hundreds	Tens	Ones
1	7	0

3. Parker divides a fruit bar into 3 equal parts. Circle the word that makes the sentence true.

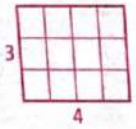
The fruit bar is divided into (thirds / halves / fourths).

GO ON

Name _____

4. Martin has a poster on his wall that is 4 feet long and 3 feet wide. What is the area of the poster?

Draw a rectangle to help solve the problem. Label your drawing. Write an equation to solve the problem.



$3 \times 4 = 12$ or $4 \times 3 = 12$

Area of the poster: 12 square feet

5. This shows a part of a multiplication table. Find the missing numbers. Explain how you found the numbers.

28	32
35	40
42	48

Possible explanation: The only numbers that have a product of 28 are 4 and 7. The only numbers that have a product of 32 are 4 and 8. This tells me that 4 is the number for the top row. That means 5 is the next row down, and 6 is the row after that. The factors of 7 and 8 are the columns, so I can multiply to find the missing numbers.

GO ON

6. Choose the number that makes the sentence true.

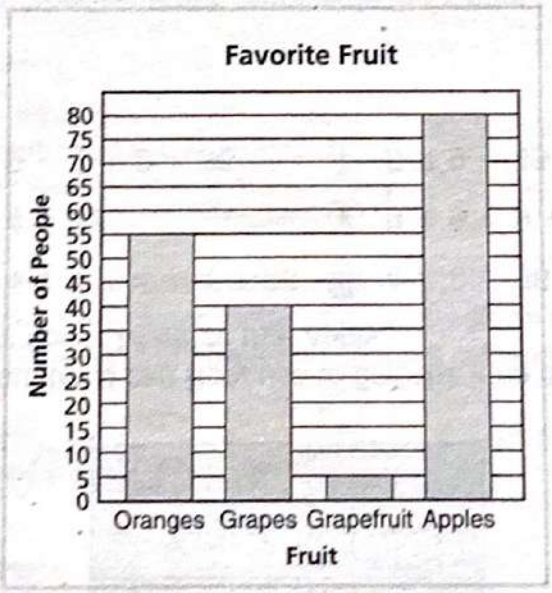
A lunchroom has 42 tables. There are 7 rows of tables in the lunchroom.

There are [5 / (6) / 7] tables in each row.

7. On Monday, 46 boys and 38 girls bought lunch at school. How many students bought lunch? Explain one way to solve the problem.

I used friendly numbers. Add 4 + 46 to get 50. Subtract 4 from 38 to get 34, and add the sums. 50 + 34 = 84

8. The bar graph shows the results of a survey of favorite fruits.



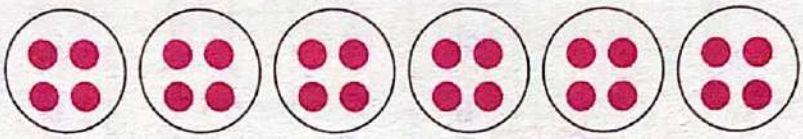
How many more people chose apples than chose grapes and grapefruit combined?

35 more people

GO ON

9. Angela plants 24 rosebushes in flowerbeds in her yard. She plants the same number of rosebushes in each of 6 flowerbeds.

Draw circles in these groups to model the problem.



How many rosebushes does Angela plant in each flowerbed?

4 rosebushes

10. Deanna, Amy, and Pam pick the same number of peaches at an orchard. They each set their peaches in 4 equal piles with 6 peaches in each pile.

Write a multiplication sentence that shows how many peaches they picked.

$3 \times (4 \times 6) = 72$

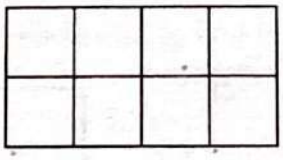
11. The rectangle has been divided into squares with equal areas. What part of the area of the rectangle is the area of each square?

(A) $\frac{1}{8}$

(B) $\frac{1}{4}$

(C) $\frac{1}{6}$

(D) $\frac{8}{8}$

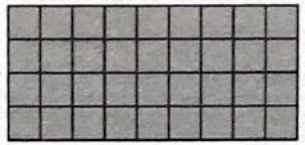


12. Luz left for the park at 2:27 P.M. She arrived at 3:09 P.M. How long did it take Luz to get to the park?

42 minutes

GO ON

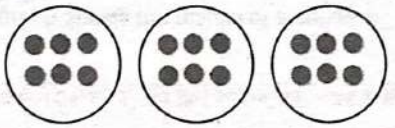
13. Rory is placing square tiles on the floor of his bathroom. Each unit square is 1 square foot.



Which equations can Rory use to find the area of the bathroom floor? Mark all that apply.

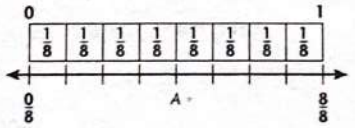
- (A) $4 + 4 + 4 + 4 + 4 = 20$
- (B) $9 \times 4 = 36$
- (C) $9 + 9 + 9 + 9 = 36$
- (D) $4 \times 9 = 36$
- (E) $9 + 9 + 9 + 9 + 9 = 45$
- (F) $5 \times 9 = 45$

14. Which number sentence represents the model?



- (A) $3 + 6 = 9$
- (B) $6 \times 6 = 36$
- (C) $3 \times 6 = 18$
- (D) $6 + 3 = 9$

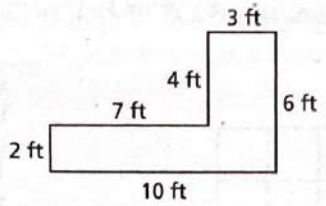
15. What fraction names point *A* on the number line?



$\frac{4}{8}$

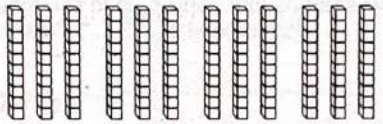
GO ON

16. Kylie and her father planted a new garden shown below. What is the area of the garden?



32 square feet

17. Nick made this multiplication model. Complete the equation that represents the model.



Possible answers: 4, 30, 120; 30, 4, 120

_____ × _____ = _____

18. Circle numbers to complete the related facts.

4
7
(8)
35

× 5 = 40 40 ÷

4
(8)
9
45

= 5

19. Dean plants 7 corn plants in each of 7 rows. How many corn plants does Dean plant?

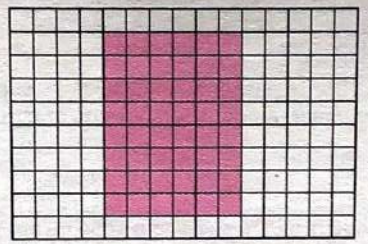
49 plants

GO ON

20. Enrique arranges 48 comic books in 6 equal stacks on his bookshelf. How many comic books does Enrique put in each stack?

Part A

Make an array to represent the problem.



Part B

Write a multiplication equation to represent the problem, using n for the unknown factor. Then solve the equation. Show your work.

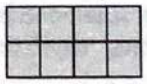
$6 \times n = 48$ or $n \times 6 = 48$; $n = 8$,
so 8 comic books in each row.

21. Glenda used square tiles to make a rectangle. The rectangle has a perimeter of 8 units and an area of 4 square units. Which could be Glenda's rectangle?

Ⓐ 

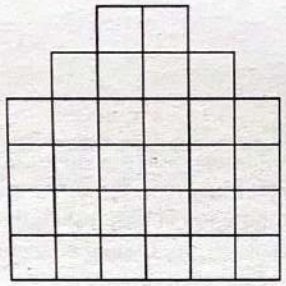
Ⓒ 

Ⓑ 

Ⓓ 

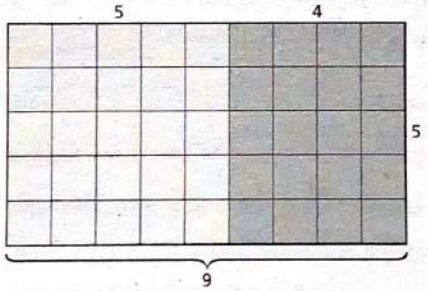
GO ON

22. What is the area of the figure shown? Each unit square is 1 square meter.



30 square meters

23. Felicia wants to find the area of the large rectangle by adding the areas of the two small rectangles.



Which expression could Felicia use to find the area of the large rectangle?

(A) $(5 \times 4) + (4 \times 5)$

(B) $(9 \times 5) + (9 \times 4)$

(C) $45 + 36$

(D) $(5 \times 5) + (4 \times 5)$

GO ON

Name _____

End-of-Year
Performance Task

Making Quilts

The third grade art class is making quilts. Solve the problems below using what you know about geometric shapes.

1. Carly wants to make a block print for the quilt. She wants to draw a closed shape with 5 line segments and 2 right angles. Draw the shape. Label the right angles. Name the shape. **Check students' drawings.**

Possible answers shown.

a. How many angles in the shape are greater than a right angle? 2

b. How many angles in the shape are less than a right angle? 1

c. How many sets of perpendicular lines did you draw? 2

d. How many sets of parallel lines did you draw? 1

e. Did you draw any intersecting lines? Explain.

No; Possible explanation: Intersecting lines are lines that cross.

There are no lines that cross in this shape.

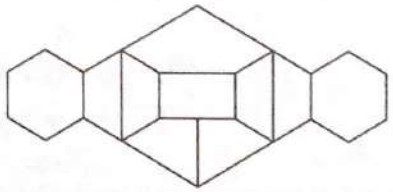
2. Carly wants to change the shape to make a hexagon. Explain how she can do this.

Possible answer: A hexagon has 6 sides. Carly needs to add one more line segment to make 6 sides and a hexagon.

GO ON

Name _____

3. Darnell uses block prints to make this design for the quilt. Study the diagram to answer the questions.



a. How many shapes have right angles? 3

b. How many shapes have perpendicular lines? 3

c. How many squares, if any, are in his design? Explain.

There are no squares. Possible explanation: Only 1 shape has 4 right angles, but it is a rectangle, not a square, because it does not have 4 equal sides.

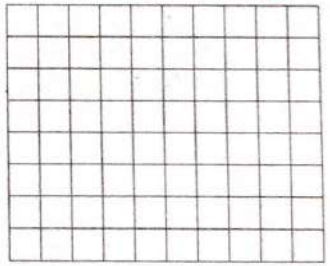
d. Classify the shapes. Complete the chart to show how many there are of each shape.

Triangles	Quadrilaterals	Rhombuses	Squares
0	7	0	0

4. Ricky makes a design for the quilt. The shape is a quadrilateral that is not a square. It has 4 sides that are of equal length. Draw the quadrilateral on the grid. Name the shape.

rhombus

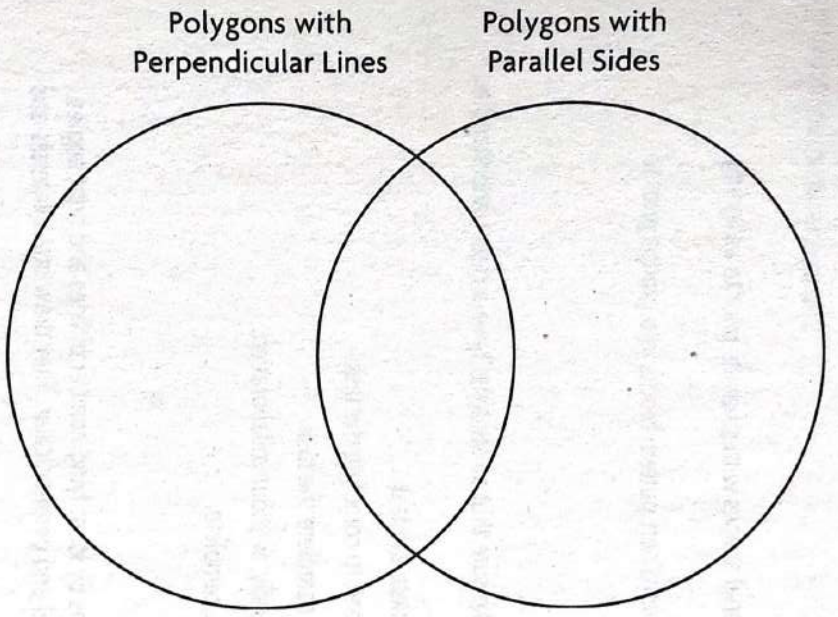
Check students' drawings.



GO ON

5. Draw four shapes to put on the quilt. Classify them using a Venn diagram. Draw two shapes in each part of the diagram.

Check students' drawings.

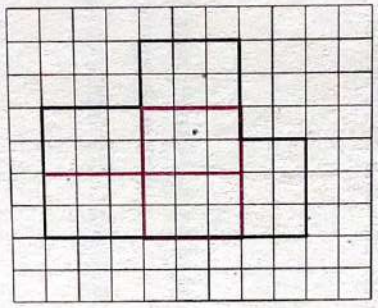


Write the name of the shapes in the section where the circles overlap.

GO ON

6. The diagram below shows the parts of the quilt that are completed.

a. Draw to divide the shapes into parts with equal areas. Write the area as a unit fraction.

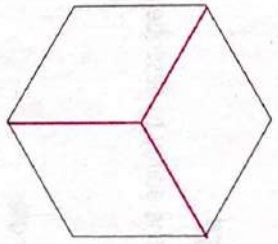


$\frac{1}{6}$

b. Suppose you wanted to find the area of the quilt that is complete. How can you use the parts to find the area? Explain.

Possible explanation: I can count the number of squares in each part. Then I can multiply the number of squares by the number of parts in the shape to find the area.

7. Sara makes this block print. How can she divide the shape into 3 rhombuses? Draw to show. Write the area as a unit fraction.



$\frac{1}{3}$