

**Missouri Assessment Program
Spring 2006**

Mathematics

Released Items

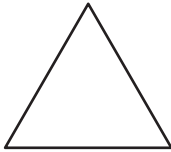
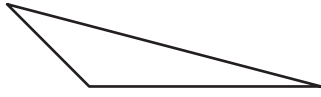
Grade 5

The McGraw-Hill Companies



Developed and published under contract with the Missouri Department of Elementary and Secondary Education by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2006 by Missouri Department of Elementary and Secondary Education. All rights reserved. Only Missouri State educators and citizens may copy and/or download and print the document, located online at <http://www.dese.state.mo.us>. Any other use or reproduction of this document, in whole or in part, requires the written permission of the Missouri Department of Elementary and Secondary Education.

1 Which polygon has rotational symmetry?



2 Mr. Thomas built a fence that is 15 yards long. How long, in feet, is the fence?

- 5 feet
- 15 feet
- 30 feet
- 45 feet

- 3 Study the number machine shown below.

NUMBER MACHINE

In	Out
3 and 9	27
4 and 1	4
9 and 6	54
7 and 5	35

What operation is used to change the *In* numbers to the *Out* number?

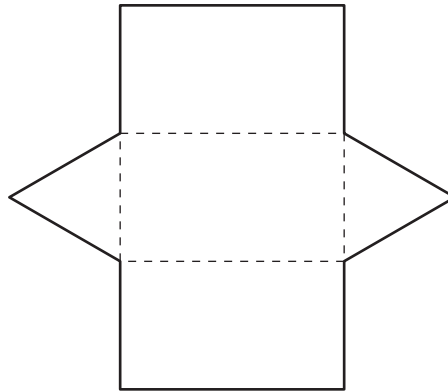
- addition
- subtraction
- multiplication
- division

- 4 A jump rope is 5 feet 8 inches long. What is the length, in inches, of the jump rope?

- 12 inches
- 40 inches
- 58 inches
- 68 inches

Go On ►

5 Study the figure below.



What 3-dimensional shape results from folding the figure along the dotted lines?

- triangular prism
- rectangular prism
- triangular pyramid
- rectangular pyramid

6

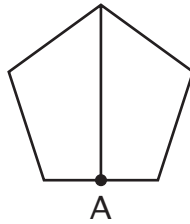
Ms. Yen's class is having a bake sale. The students will sell 6 brownies for \$4.00. How many brownies will they need to sell in order to raise \$32.00? In the box below, provide the work that shows how you arrived at your answer and write your answer on the line.

_____ brownies

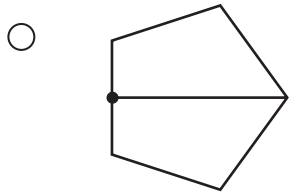
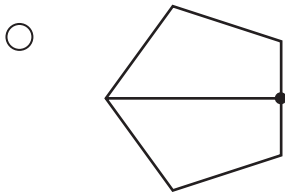
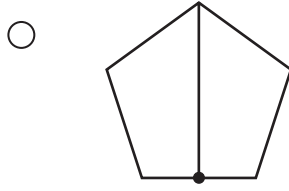
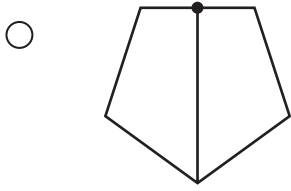
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓

Go On ▶

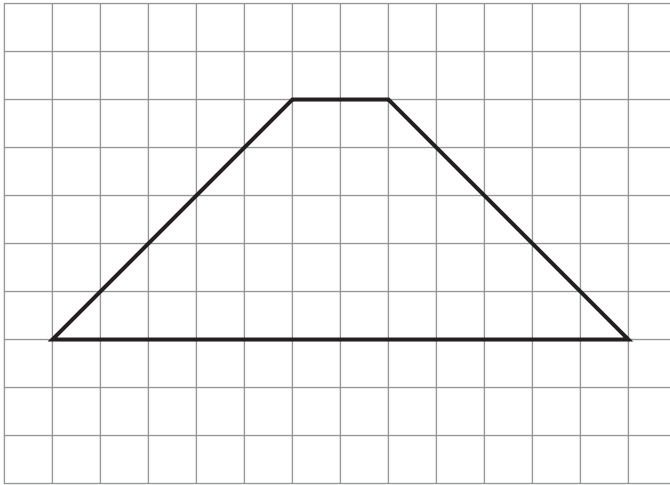
7 Study the shape below.




Which shape represents a 90-degree clockwise turn around point A?



8 Study the figure on the grid below.



KEY	
	= 1 square foot

The figure shows the section of Mr. Gomez's classroom that is covered with carpet. What is the area of the carpet? Write your answer on the line.

_____ square feet

On the lines below, explain how you found the area.

Go On ►

DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓

- 9 Ms. Wilson is making paper flowers. The table below shows the number of petals needed to make each flower.

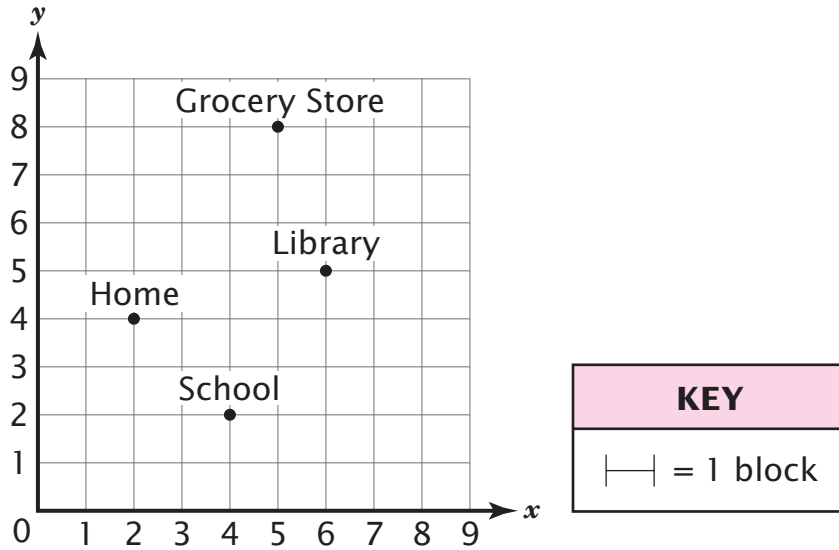
PAPER FLOWERS

Number of Flowers	Number of Petals
1	5
3	15
4	20
7	35

What is the total number of petals needed to make 9 flowers?

- 9
- 14
- 40
- 45

10 Study the grid below. The lines on the grid represent streets in Tina's neighborhood.



From the school, Tina walks to the library, to the grocery store, and then to her home. Tina walks the shortest distance possible and only walks along the streets. How many blocks does Tina walk?

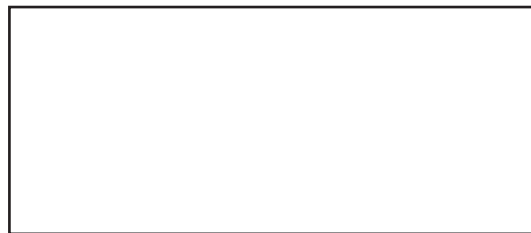
- 13
- 14
- 15
- 16

11



Use the centimeter side of your ruler to help you solve this problem.

Study the rectangle below.



Find the area of the rectangle to the nearest centimeter.

- 10 square centimeters
- 20 square centimeters
- 21 square centimeters
- 49 square centimeters

Go On ►

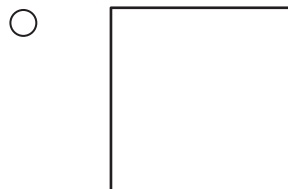
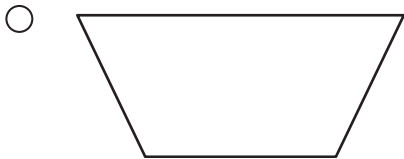
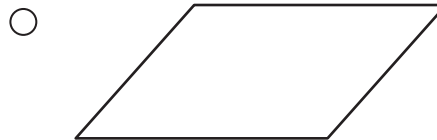
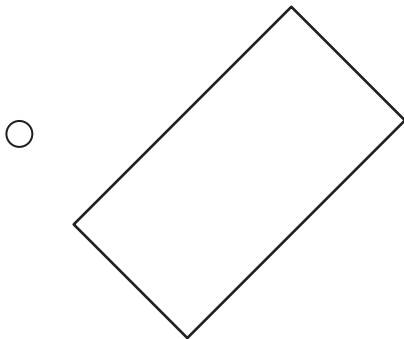
15 Study the number sentence below.

$$(3 \square 12) \circ 5 = 31$$

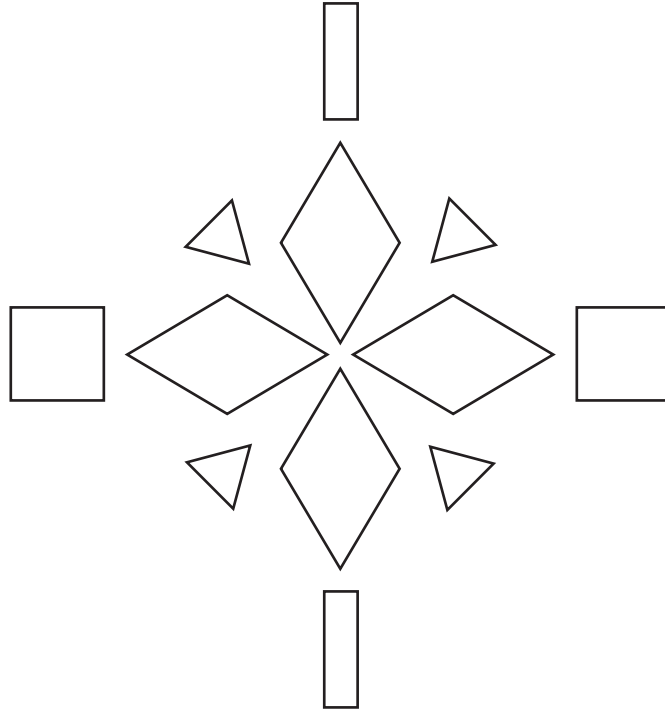
Which two operations will make the number sentence true?

- \div and $+$
- $+$ and \times
- $+$ and $+$
- \times and $-$

16 Which shape is *not* a parallelogram?



17 Study the shapes below.

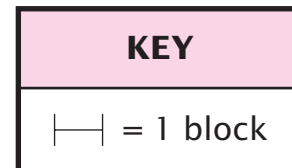
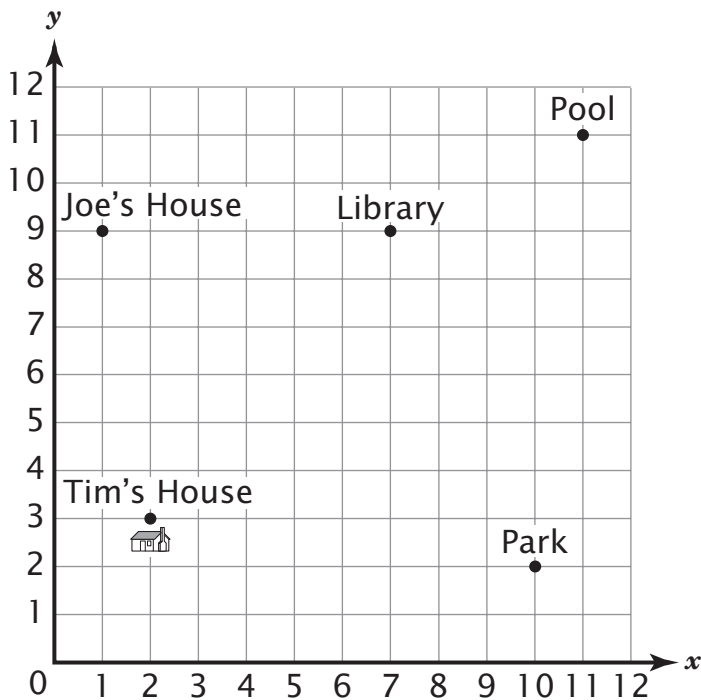


Mark an X on **each** shape that appears to be a parallelogram.

On the lines below, describe one characteristic of parallelograms.

Go On ►

- 18 The grid below shows the location of places in Tim's neighborhood.



From his house, Tim walks 2 blocks east, then 6 blocks north, and then 3 blocks east. To what place does Tim walk?

- Park
- Swimming Pool
- Joe's House
- Library

- 19 Ms. Miller leaves her home at 7:30 A.M. She returns home at 5:30 P.M. How many hours is Ms. Miller away from her home?

- 2 hours
- 8 hours
- 10 hours
- 12 hours

- 20** Each day, a bakery bakes 40 cakes. The table below shows the relationship between the number of days worked and the total number of cakes baked.

What was the total number of cakes baked after 4 days?

- 140
 160
 200
 320

CAKES BAKED

Days Worked	Number of Cakes Baked
1	40
2	80
3	120
4	<input type="text"/>

- 21** The table below shows the number of gallons of ice cream, by flavor, sold at a store during the months of April through July.

ICE CREAM SALES

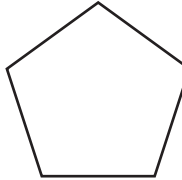
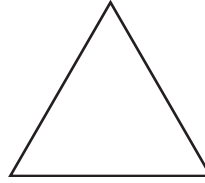
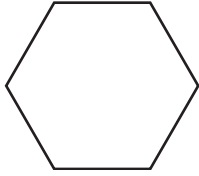
Flavor	Gallons Sold in April	Gallons Sold in May	Gallons Sold in June	Gallons Sold in July
Strawberry	12	14	16	18
Vanilla	15	15	22	19
Chocolate	18	24	29	31
Orange Swirl	6	13	20	11

Based on the information in the table, predict which flavor of ice cream the store will sell the most in August.

- strawberry
 vanilla
 chocolate
 orange swirl

Go On ►

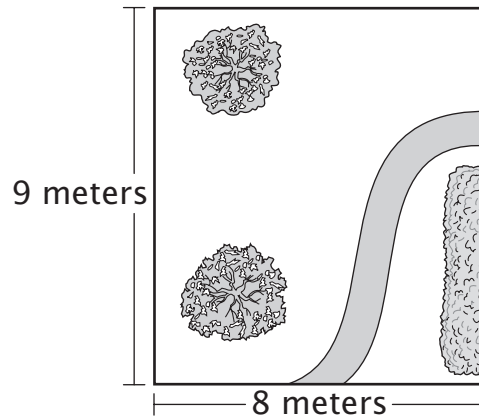
22 Which of these shapes is a quadrilateral?



23 Study the picture of the garden below.

What is the area of the garden?

- 17 meters
- 34 meters
- 34 square meters
- 72 square meters



[Not drawn to scale]

24

A baker makes 14 cakes each day. If he starts baking 14 cakes on Monday, by what day of the week will he have baked 84 cakes all together? In the box below, use pictures or words to explain how you solved the problem and write your answer on the line.

day of the week _____

DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓
DO NOT WRITE HERE ↓

Go On ▶

25

Each week Carol saves the same amount of money. Which table below shows the total amount of money Carol saves during a 5-week period?

CAROL'S SAVINGS

Week	Total Dollars Saved
1	\$7.00
2	\$15.00
3	\$24.00
4	\$34.00
5	\$45.00

CAROL'S SAVINGS

Week	Total Dollars Saved
1	\$7.00
2	\$14.00
3	\$21.00
4	\$28.00
5	\$35.00

CAROL'S SAVINGS

Week	Total Dollars Saved
1	\$7.00
2	\$13.00
3	\$18.00
4	\$22.00
5	\$25.00

CAROL'S SAVINGS

Week	Total Dollars Saved
1	\$7.00
2	\$14.00
3	\$28.00
4	\$56.00
5	\$112.00

- 26** Each car in the parking lot has 4 tires. There are 138 cars in the parking lot. What number sentence can be used to find the total number of tires in the parking lot?

$t = \text{the number of tires}$

- $138 - 4 = t$
- $138 \times 4 = t$
- $138 \div 4 = t$
- $138 + 4 = t$

- 27** Mr. Jonas teaches art at Forest School. His first class begins at 10:30 A.M. He teaches 4 classes in a row, each day. Each class lasts 1 hour. At what time does Mr. Jonas's last class end?

- 1:30 A.M.
- 2:30 A.M.
- 1:30 P.M.
- 2:30 P.M.

STOP 