

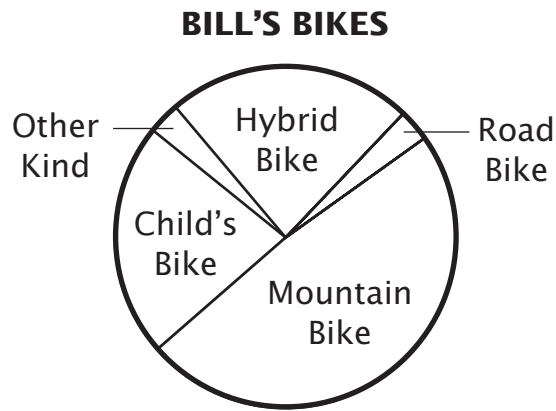
**Missouri Assessment Program
Spring 2006**

Mathematics

Released Items

Grade 6

1 The circle graph below shows sales of different kinds of bikes at Bill's Bikes.



Which kind of bike had approximately twice the sales as hybrid bikes?

- road bike
- child's bike
- mountain bike
- other kind of bike

2 Ms. Williams is making a design using tiles, as shown below.



Which statement describes the pattern?

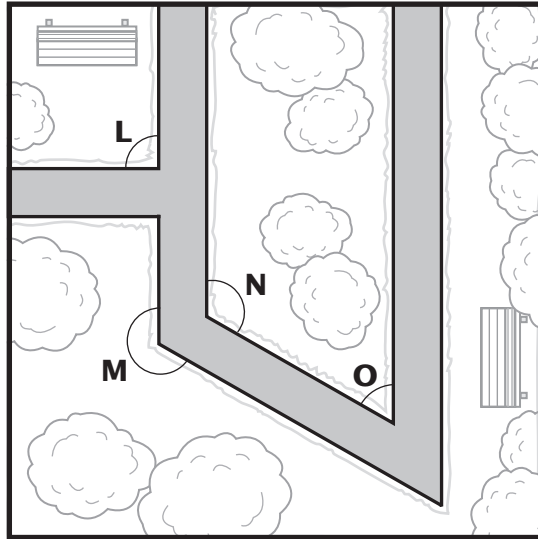
- 1 large tile above and 2 small tiles below
- 1 large tile above and 3 small tiles below
- 2 large tiles above and 3 small tiles below
- 2 large tiles above and 4 small tiles below

3



Use your protractor to help you solve this problem.

The picture below shows walking paths in a park.



Which angle is an acute angle?

- angle L
- angle M
- angle N
- angle O

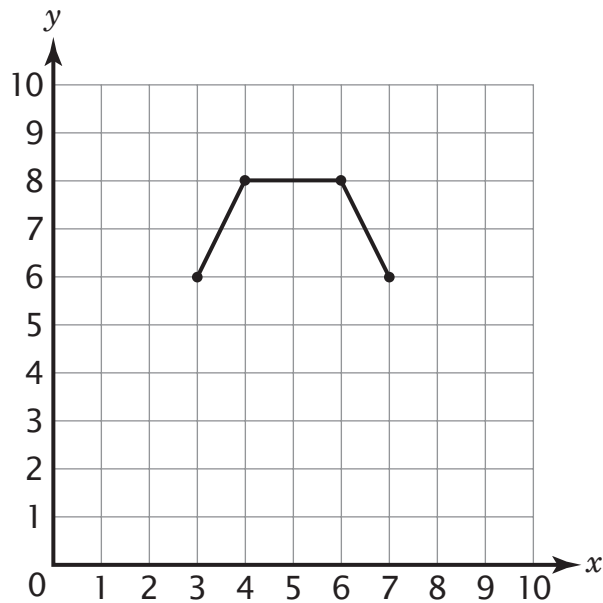
4

A rectangular field measures 40 feet wide by 20 feet long. Which of these shows how to find the area of the field?

- 40 feet + 20 feet
- 40 feet \times 2
- 2(40 feet + 20 feet)
- 40 feet \times 20 feet

Go On ►

- 5** Study the grid below.



Which two pairs of coordinates can be used so that the figure on the grid, when completed, is a hexagon?

- (2, 4), (8, 4)
 (4, 4), (6, 4)
 (4, 6), (6, 6)
 (3, 6), (7, 6)

- 6** Each of the 3 sixth-grade classes at Jefferson School has 25 students. On picture day, a few students were absent. Which expression shows how many sixth-grade students had their pictures taken?

p = number of sixth-grade students who were absent on picture day

- $(25 - p) \times 3$
 $(25 - p) \div 3$
 $(25 \times 3) - p$
 $(25 \div 3) - p$

7 Study Figure A and Figure B below.

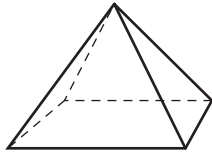


Figure A



Figure B

In the table below, fill in the correct number of faces, vertices, and edges for Figure A and Figure B.

	Number of Faces	Number of Vertices	Number of Edges
Figure A			
Figure B			

8 Karen baked cookies for 2 hours and 25 minutes. She finished baking cookies at 4:15 P.M. What time did she begin baking cookies?

- 1:50 P.M.
- 2:40 P.M.
- 2:50 P.M.
- 6:40 P.M.

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12 Kyle is 3 years older than twice his sister's age. His sister is 5 years old. How old is Kyle?

- 7
- 8
- 10
- 13

14 Study the figures labeled A and B.

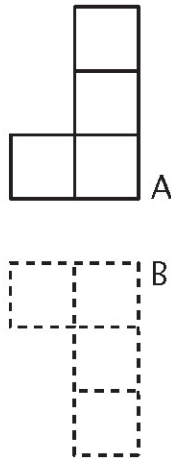


Figure B shows Figure A after 1 transformation. Which transformation was used—a flip, a slide, or a turn? Write your answer on the line.

In the figures above, draw the flip line, slide arrow, or turn point on the figures for the transformation you chose.

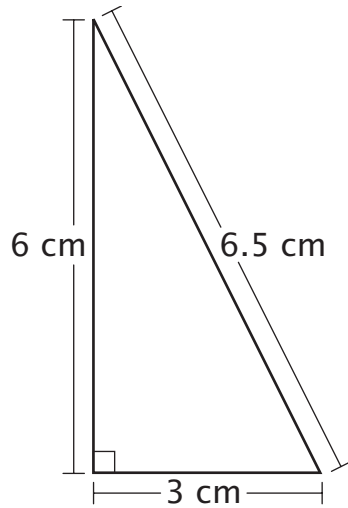
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17 Jodi wants to rent sports equipment to people at the park. She needs to know the equipment that will rent most often. Which is the best method to gather the information?

- observe the equipment that most people buy at a sports store
- survey adults at the library on Saturday afternoon
- survey elementary school students on the playground
- observe the equipment that most people rent at different rental stands

18 Study the triangle below.



$$\text{Area for a triangle} = \frac{1}{2} \times \text{base} \times \text{height}$$

Which of these expressions can be used to find the area of the triangle?

- $6 + 6.5 + 3$
- $\frac{1}{2}(3 \times 6)$
- $3 \times 6 + 6.5$
- $\frac{1}{2}(3 \times 6.5)$

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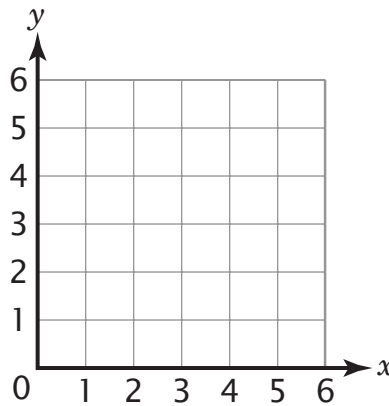
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- 19 The table below shows the coordinates for points A, B, C, and D.

Point	A	B	C	D
Coordinates	(1,5)	(1,3)	(4,3)	(4,5)

Locate and label the points A, B, C, and D on the grid below.



Connect the points to create a polygon. On the line below, write the name of the polygon.

20 Which expression shows the same value as $3(40 + n)$?

- $(3 + 40) + (3 + n)$
- $(3 \times 40) + (3 \times n)$
- $(3 + 40) \times (3 + n)$
- $(3 \times 40) \times (3 \times n)$

21 Study the table below. The table shows the information about 4 accounts that were opened at the same time.

SAVINGS ACCOUNTS INFORMATION

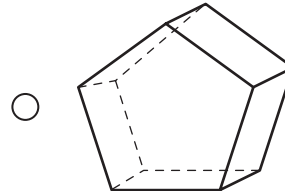
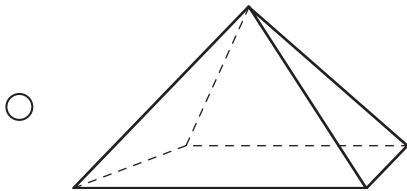
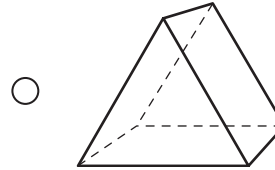
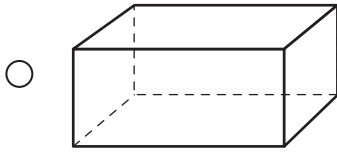
Name	Amount When Opened	Monthly Deposit
Linda	\$25	\$15
Michael	\$40	\$10
Nelson	\$30	\$14
Olivia	\$20	\$20

Who will be the first to have \$100 in his or her savings account?

- Linda
- Michael
- Nelson
- Olivia

Go On ►

22 Which 3-dimensional figure has 7 faces, 15 edges, and 10 vertices?



23 Study the table below.

**MEASUREMENT
CONVERSIONS**

1 foot = 12 inches
1 yard = 3 feet
1 mile = 1,760 yards

What is the best estimate for the number of inches in a mile?

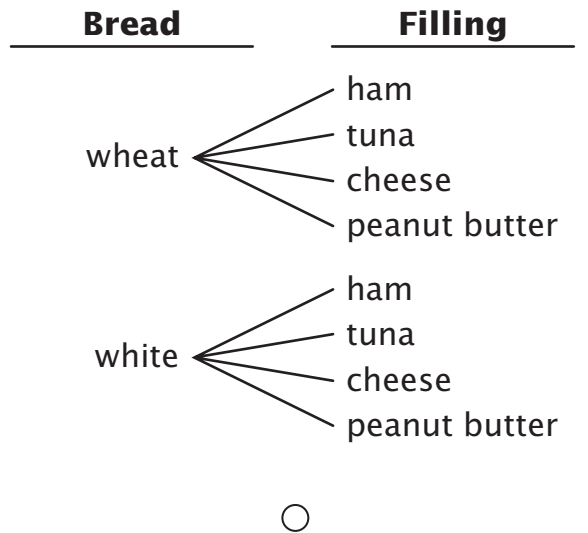
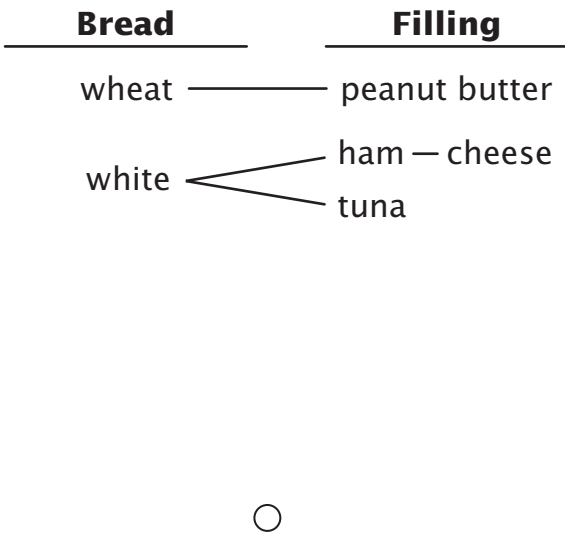
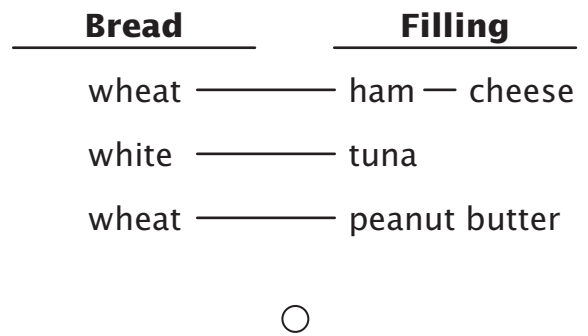
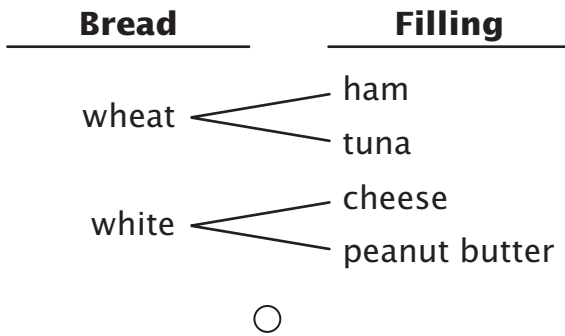
- 40,000 inches
- 60,000 inches
- 90,000 inches
- 120,000 inches

25

Sela uses one type of bread and one type of filling to make each sandwich.

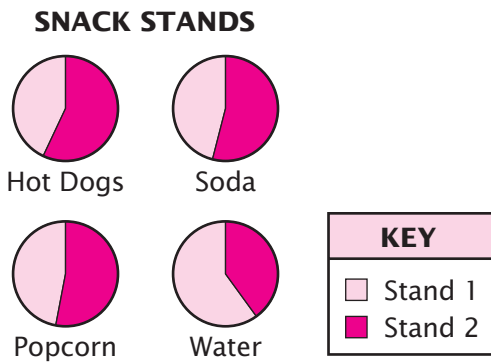
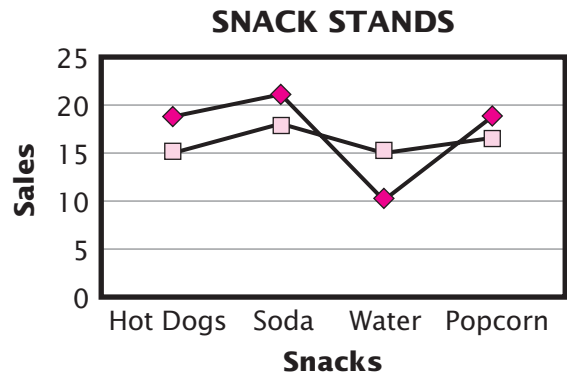
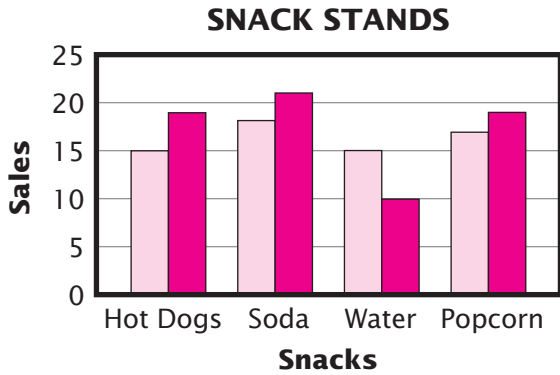
<u>Bread</u>	<u>Filling</u>
wheat	ham
white	tuna
	cheese
	peanut butter

Which diagram shows all the possible types of sandwiches Sela can make?



26

Each of two snack stands at the soccer field collected data to compare sales. Which of these does *not* show the number of hot dogs sold at each stand?



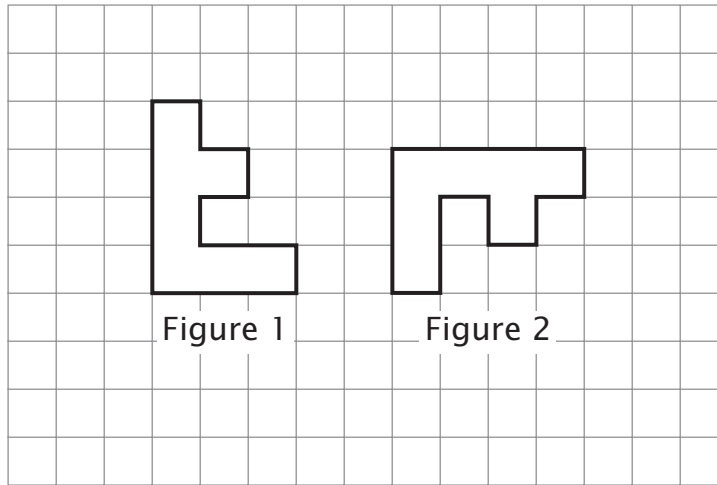
SNACK STANDS

Snacks	Stand 1	Stand 2
Hot Dogs	15	19
Soda	18	21
Water	15	10
Popcorn	16	19

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27 Study the figures on the grid below.



Which two transformations could be used to change Figure 1 to Figure 2?

- a flip and a slide
- a slide and a flip
- a counterclockwise 90° turn and a slide
- a clockwise 90° turn and a slide

STOP 