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## Student Name

The intent of these sample test materials is to orient teachers and students to the types of questions on FCAT 2.0 tests. By using these materials, students will become familiar with the types of items and response formats they will see on the actual test. The sample questions and answers are not intended to demonstrate the length of the actual test, nor should student responses be used as an indicator of student performance on the actual test. Additional information about test items can be found in the *FCAT 2.0 Test Item Specifications* at <http://fcat.fldoe.org/fcat2/itemspecs.asp>.

The FCAT 2.0 Mathematics tests and sample questions and answers are based on the 2007 Next Generation Sunshine State Standards.

The sample questions for students and the sample answers for teachers will only be available online, at <http://fcat.fldoe.org/fcat2/fcatitem.asp>.

## Directions for Answering the Mathematics Sample Questions

The questions in this booklet are called multiple-choice questions. **A multiple-choice question is followed by several answer choices.** Read all the answer choices under each question and decide which answer is correct. Fill in the bubble next to the answer choice you think is correct for each multiple-choice question.

Mark your answers in this booklet. If you don't know how to work a problem, ask your teacher to explain it to you. Your teacher has the answers to the sample questions.

Calculators are NOT to be used with the Grade 3 FCAT 2.0 Mathematics Sample Questions.

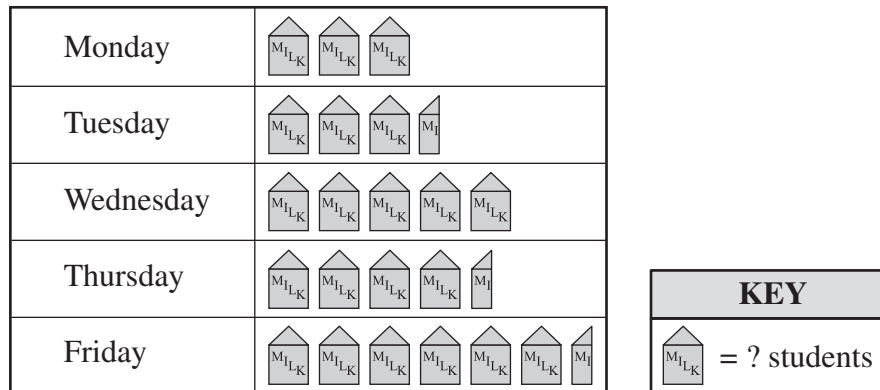
FCAT 2.0 Mathematics will include perforated rulers for students in Grades 3 and 4. You will need a ruler to answer some of these sample questions. A sample ruler and directions for using the ruler are provided on the inside BACK cover of this booklet.

Note: The dimensions for the graphics on items that require the use of a ruler may not be accurate if this Web-based page is printed on a desktop printer because the printer may shrink content to fit the page; however, during the production of test booklets, the Florida Department of Education takes quality assurance steps to ensure the dimensions and scale are accurate in the items that require the student to use a ruler to measure.

Instructions for printing sample documents are provided on the inside BACK cover of this booklet.

- 1 Kevin made a pictograph to show the number of students in his class who drink milk at lunch.

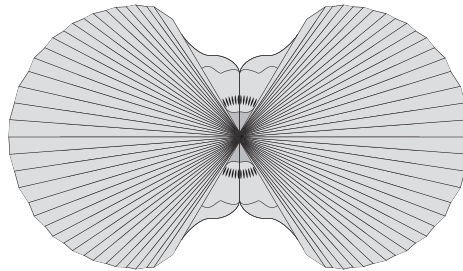
**STUDENTS DRINKING  
MILK AT LUNCH**



If the pictograph shows that 6 students drink milk at lunch on Monday and 10 students drink milk at lunch on Wednesday, how many students drink milk at lunch on Friday?

- (A) 6
- (B) 7
- (C) 12
- (D) 13
- 2 Isabella cannot remember the product of  $9 \times 8$ . Which of the following is another expression that Isabella could use to find the product of  $9 \times 8$ ?
- (F)  $(9 \times 5) + (9 \times 3)$
- (G)  $(9 \times 4) + (9 \times 2)$
- (H)  $(9 \times 1) + (4 \times 2)$
- (I)  $(9 \times 2) + (8 \times 6)$

- 3 The drawing below shows an open scallop shell.



How many lines of symmetry does the drawing have?

- (A) 3
  - (B) 2
  - (C) 1
  - (D) 0
- 4 Dorian is making a border for his bedroom wall using the pattern below.



What is the next figure in his pattern?



(F)



(G)

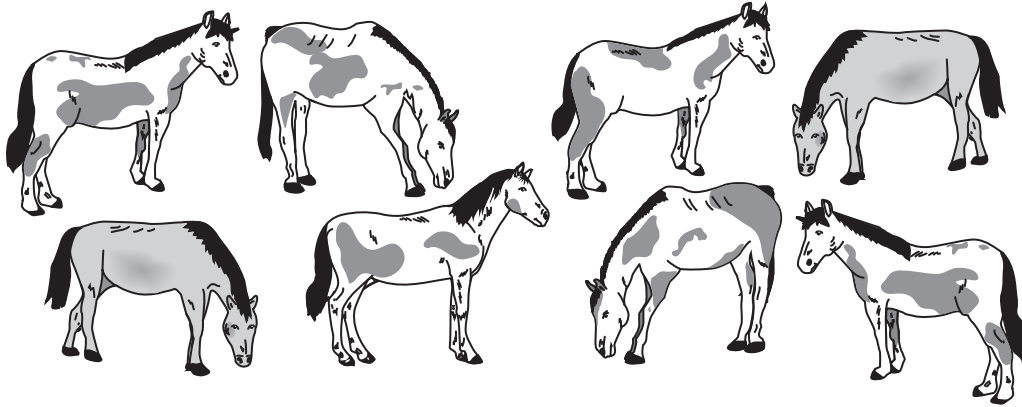


(H)



(I)

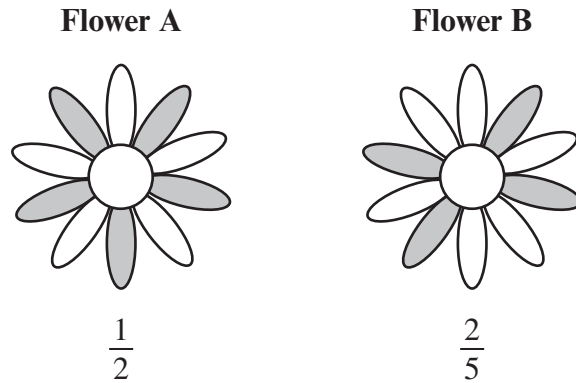
- 5 Leia visited a horse ranch. She noticed that  $\frac{6}{8}$  of the horses were spotted, as shown below.



Which fraction is equivalent to  $\frac{6}{8}$ ?

- (A)  $\frac{1}{2}$
- (B)  $\frac{1}{4}$
- (C)  $\frac{2}{3}$
- (D)  $\frac{3}{4}$
- 6 A group of 4 friends will share 32 pieces of candy equally. Which expression can be used to find how many pieces of candy each friend will get?
- (F)  $32 + 4$
- (G)  $32 - 4$
- (H)  $32 \div 4$
- (I)  $32 \times 4$

- 7 Two flowers are pictured below. On Flower A,  $\frac{1}{2}$  of the petals are shaded. On Flower B,  $\frac{2}{5}$  of the petals are shaded.



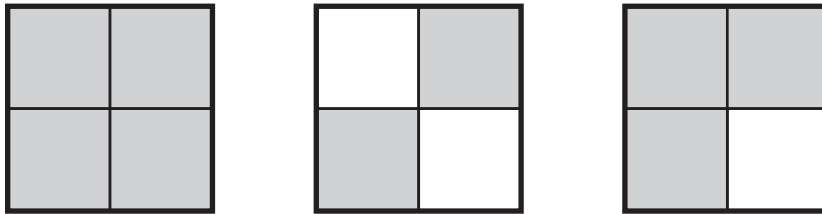
Which inequality below correctly compares the fractions of petals that are shaded?

- (A)  $\frac{1}{2} > \frac{2}{5}$
- (B)  $\frac{1}{2} < \frac{2}{5}$
- (C)  $\frac{2}{1} > \frac{5}{2}$
- (D)  $\frac{2}{1} < \frac{5}{2}$

- 8 Chris gave 2 beach balls to each friend who came to his birthday party. He had 8 friends at his party. Which equation could be used to find the total number of beach balls Chris gave to his friends at the party?

- Ⓕ  $8 \times b = 2$
- Ⓖ  $b \times 2 = 8$
- Ⓗ  $8 \div 2 = b$
- Ⓘ  $b \div 8 = 2$

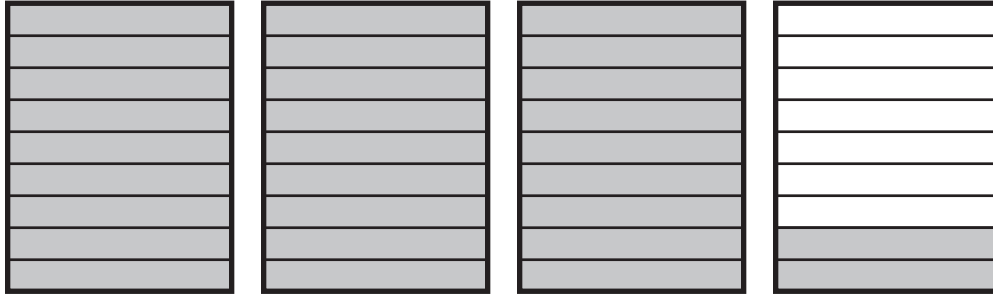
- 9 Rosalyn drew three figures and shaded parts of each figure.



Which mixed number is represented by the shading of the three figures above?

- Ⓐ  $2\frac{1}{4}$
- Ⓑ  $2\frac{3}{4}$
- Ⓒ  $3\frac{1}{4}$
- Ⓓ  $3\frac{1}{2}$

- 10 In the picture below,  $3\frac{2}{9}$  of the figures are shaded.



Which fraction is equivalent to  $3\frac{2}{9}$ ?

- F  $\frac{29}{4}$
- G  $\frac{29}{7}$
- H  $\frac{29}{9}$
- I  $\frac{29}{36}$

- 11 Ms. Tanaka is ordering calendars for the students at 4 elementary schools. The table below shows the number of students at each of the schools.

**STUDENTS IN ELEMENTARY SCHOOLS**

Name of School	Number of Students
Greendale	1,789
Jones Park	1,032
Shady River	2,115
Wakefield	1,992

Which is the **best** estimate of the total number of calendars Ms. Tanaka needs to order for the students in all 4 schools?

- Ⓐ 4,000
- Ⓑ 5,000
- Ⓒ 7,000
- Ⓓ 8,000



- 12 Mr. Jarrell has 4 students in his chess club. He will put them in pairs to play a game of chess. The chart below shows the names of the students in the club.

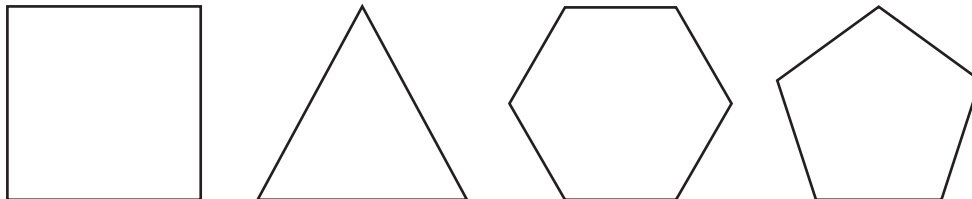
**STUDENTS IN CHESS CLUB**

Charles	Erin	Gayle	Paco
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What is the total number of different pairs of two students that can be made?

- Ⓕ 8
- Ⓖ 6
- Ⓗ 4
- Ⓘ 2

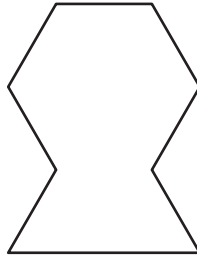
- 13 Diane drew the four shapes shown below.



Which of the following is true about all of the shapes?

- Ⓐ Each shape has exactly two pairs of parallel sides.
- Ⓑ Each shape has exactly five vertices.
- Ⓒ Each shape is a regular polygon.
- Ⓓ Each shape is a quadrilateral.

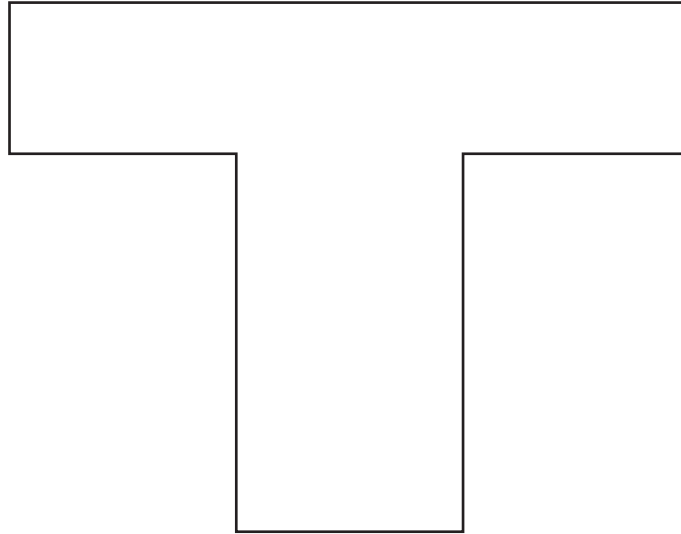
- 14 Akele noticed a figure like the one shown below in his math book.



Which set of shapes could be put together, without overlapping, to make a figure that looks exactly the same as Akele's figure?



- 15 Theodore drew a picture like the one shown below on the front of his notebook.



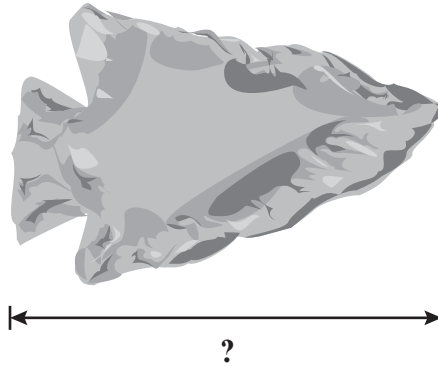
Using the provided ruler, what is the perimeter, in centimeters, of Theodore's picture?

- Ⓐ 36 centimeters
- Ⓑ 32 centimeters
- Ⓒ 28 centimeters
- Ⓓ 26 centimeters

**Note:** The dimensions in this graphic may not be accurate if this Web-based page is printed on a desktop printer because the printer may shrink content to fit the page; however, during the production of test booklets, the Florida Department of Education takes quality assurance steps to ensure the dimensions and scale are accurate in the items that require the student to use a ruler to measure.

- 16 Terrence found a stone arrowhead like the one shown below.

Stone Arrowhead

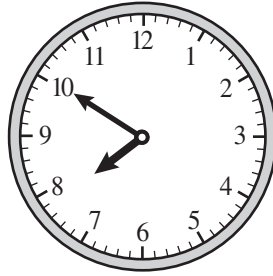


Using the provided ruler, what is the exact length, in inches, of the stone arrowhead?

- Ⓕ 2 inches
- Ⓖ  $2\frac{1}{2}$  inches
- Ⓗ  $2\frac{1}{4}$  inches
- Ⓘ  $2\frac{1}{8}$  inches

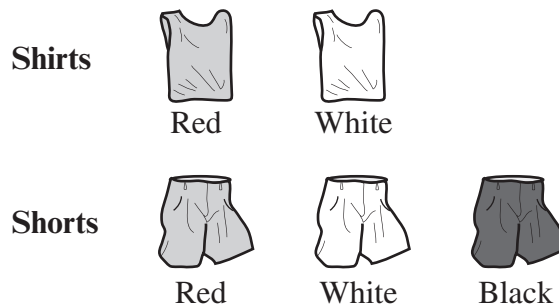
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- 17 The clock below shows the time Kadin left for the airport.



Kadin arrived at the airport 25 minutes later. What time did Kadin arrive at the airport?

- (A) a quarter to seven
  - (B) a quarter after seven
  - (C) a quarter to eight
  - (D) a quarter after eight
- 18 The Eagles soccer team's uniform consists of either a red or white shirt and either red, white, or black shorts.



How many different uniform combinations are possible?

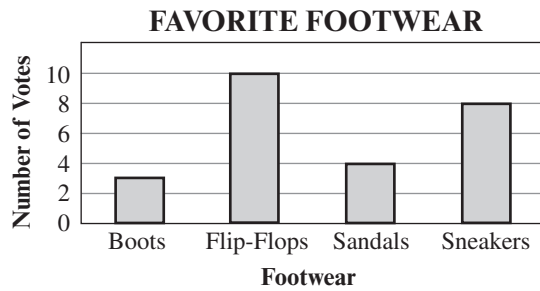
- (F) 2
- (G) 5
- (H) 6
- (I) 8

- 19 The students in Mrs. Livingston’s class voted for their favorite kind of footwear. The number of votes is shown in the table below.

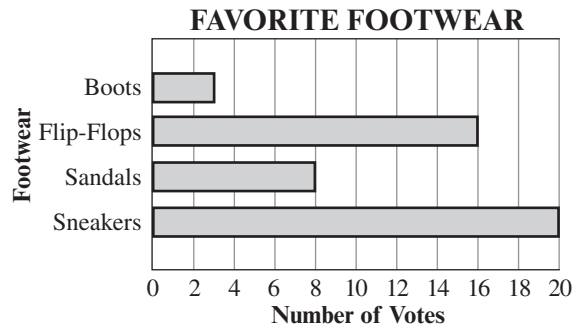
**FAVORITE FOOTWEAR**

Footwear	Boots	Flip-Flops	Sandals	Sneakers
Number of Votes	3	8	4	10

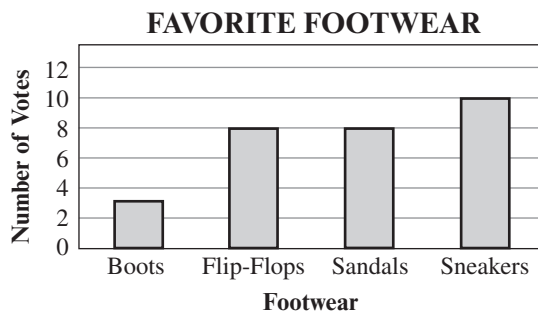
Which bar graph correctly shows the same information as the table?



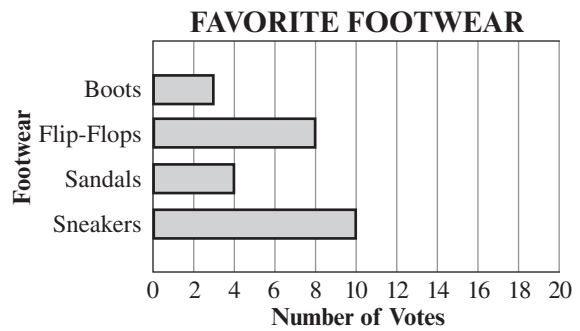
(A)



(C)

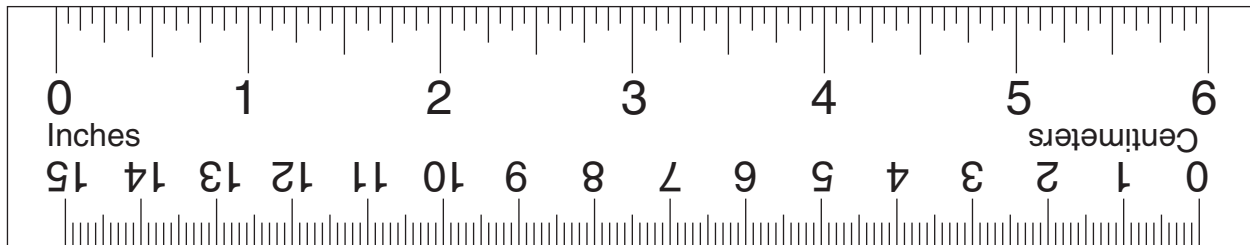


(B)



(D)

Please use this provided ruler for sample questions.

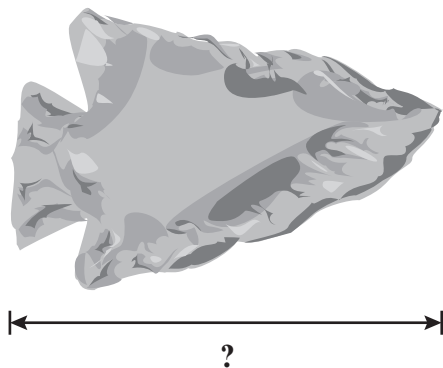


CUT HERE ✂ ✂ CUT HERE ✂ ✂ CUT HERE ✂ ✂ CUT HERE ✂ ✂ CUT HERE ✂ ✂ CUT HERE

The FCAT 2.0 Mathematics Grades 3 and 4 tests will require the use of a provided six-inch ruler with both metric and customary units. Items that require the student to use a ruler to measure and solve will use the wording “Using the provided ruler . . .” in the question. Graphics that need to be measured may include a line segment indicating the linear measure needed.\* For example,

Terrence found a stone arrowhead like the one shown below.

**Stone Arrowhead**



Using the provided ruler, what is the exact length, in inches, of the stone arrowhead?

\*Note: Not all items will include an extracted line segment for students to measure.

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#### PRINTING SAMPLE DOCUMENTS

When printing sample documents, you will need to change print settings so printed pages will be the correct scale for Grades 3 and 4 Mathematics measurement items. Here are instructions for both PCs and Macs:

1. Open the file in Adobe Acrobat.
2. From the top menu, click on “File.”
3. Click on “Print.”
4. In the printer dialogue box, find the drop-down menu labeled “Print Scaling” or “Page Scaling.”
5. On the drop-down menu, click on “None.”
6. Click on “OK” (for PCs) or “Print” (for Macs).



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