fkb Practice Tests

Grade 5 Maths

with answers

These tests are compiled from
public domain resources
mailny from state issued tests.

free kids Books

Contents and Printing Guide

This page can be used for selecting material to print for students, note, document may be printed as a paper or electronic (pdf) copy using the page subsets below.

Want to find more great books like this one?

https://www.freekidsbooks.org

Simply great free books -

Preschool, early grades, picture books, learning to read,
early chapter books, middle grade, young adult,
Pratham, Book Dash, Mustardseed, Open Equal Free, and many more!

Always Free – Always will be!

Louisiana Believes

Grade 5 Math Practice Test

2013-2014

DEPARTMENT of EDUCATION
Louisiana Believes

*i*LEAP Practice Test—Grade 5 Math

Test Administrator Instructions

★ This document contains a Practice Test that shows what each part, or session, of an actual grade 5 math assessment is like.

The Practice Test may be used at home or at school for students to become familiar with the *i*LEAP test they will take in spring 2014. It may help students feel more relaxed when they take the actual test.

★ The Assessment Structure provides information on the overall design of the actual test. The Assessment Structure and example items can be found on the Louisiana Department of Education's website.

http://www.louisianabelieves.com/resources/library/assessment-guidance-2013-2014

The mathematics test has three sessions to be taken separately:

- Session 1 (pages 3 to 17) includes 30 multiple-choice questions—a calculator may not be used.
- Session 2 (pages 19 to 28) includes 20 multiple-choice questions—a calculator may be used.
- Session 3 (pages 30 to 33) includes 2 constructed-response questions—a calculator may be used.

★ A Mathematics Reference Sheet, which students may use for all sessions, is located on page 36.

★ Students respond to multiple-choice items using the Answer Sheets on pages 34 and 35 and constructed-response items using pages 30 to 33 of Session 3.

★ The Answer Keys and Scoring Rubrics, used to score student responses, are located on pages 37 to 40.

When printing the PDF files for the three Math Sessions, be sure to set the *Page Scaling* drop-down menu on the Print screen to None, No Scaling, or Actual Size depending on the printer you are using. Otherwise, measurement items may not be the correct size, which may impact student responses.

DEPARTMENT of EDUCATION
Louisiana Believes

Math—Sessions 1, 2, and 3
GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

Session 1—Math (No Calculator)

Write your answers for questions 1 through 30 in the spaces provided on page 34, session 1 answer sheet. Write only one answer for each question. You may work problems in your test booklet or on scratch paper, but you must mark your answer on your answer sheet. You may review your work in this session, but do not work on any other session.

You may NOT use a calculator for this session.

1. Julia collects colored beads for craft projects. Of Julia's beads, $\frac{4}{9}$ are silver, $\frac{1}{5}$ are gold, and $\frac{1}{4}$ are blue. The rest of the beads are red. Which expression gives the **closest** estimate of the fraction of red beads Julia has?

A. $1 - \frac{1}{2} - \frac{1}{2} - \frac{1}{2}$

B. $1 - \frac{2}{3} - \frac{1}{3} - \frac{1}{3}$

C. $1 - \frac{1}{4} - \frac{1}{4} - \frac{1}{4}$

D. $1 - \frac{2}{5} - \frac{1}{5} - \frac{1}{5}$

2. There are 2,817 homes in the town of West Valley. Each home uses an average of 380 gallons of water each day. Use the expression below to find the total number of gallons of water the homes in West Valley use on average each day.

2,817 × 380

What is the total number of gallons of water the homes in West Valley use on average each day?

A. 860,460 gallons

B. 870,460 gallons

C. 1,060,460 gallons

D. 1,070,460 gallons

Session 1—Math (No Calculator)

3. Sara poured $1\frac{1}{8}$ cups of lemonade into each of 5 glasses. What was the total amount of lemonade Sara poured into the 5 glasses?

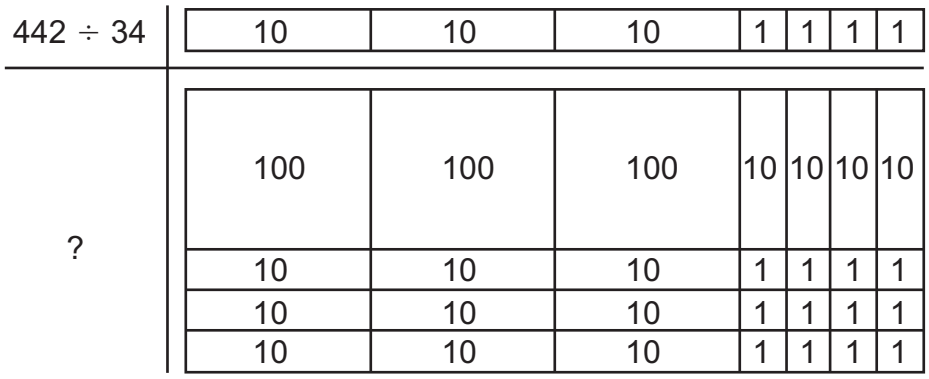
A. $3\frac{7}{8}$ cups

B. $5\frac{1}{8}$ cups

C. $5\frac{5}{8}$ cups

D. $6\frac{1}{8}$ cups

4. Each member of Mark's school band sold the same number of tickets to their concert. Altogether the members of the school band sold a total of 442 tickets. There are 34 members of the band. To determine the number of tickets each member sold, Mark used the model shown.



How many tickets did each member of Mark's school band sell?

A. 13 tickets

B. 34 tickets

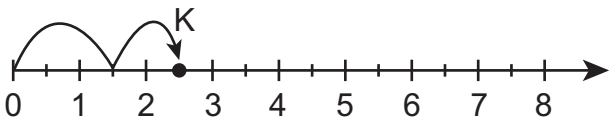
C. 408 tickets

D. 440 tickets

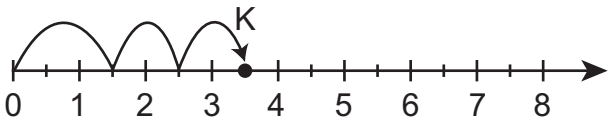
Session 1—Math (No Calculator)

5. Kara went running 3 times this week. Each time, she ran 2.5 miles. Which number line has point K graphed so that it **best** represents the total distance Kara ran, in miles?

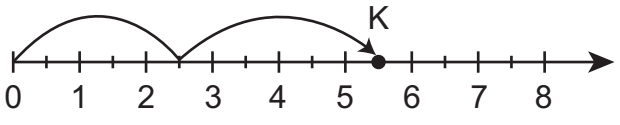
A.



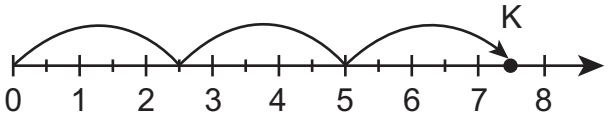
B.



C.



D.



6. A theater collected $6 for each ticket sold to a movie. The theater sold 500 tickets to the movie. The expression below can be used to find how much money the theater collected for the tickets.

6×500

Which expression can also be used to find how much money the theater collected for the tickets?

A. 30×10^1

B. 30×10^3

C. $(6 \times 5) \times 10^2$

D. $(6 \times 5) \times 10^3$

Session 1—Math (No Calculator)

7. The schedule for a music showcase includes 3 sets that are 20 minutes each and 1 set that is 40 minutes. There is a 10-minute break between each set. The total length of the music showcase is 3(20 + 10) + 40 minutes. What is the total length of the music showcase?

A. 73 minutes

B. 110 minutes

C. 130 minutes

D. 210 minutes

8. Carole used $3\frac{3}{4}$ cups of butter for baking. The amount of sugar she used was $\frac{1}{3}$ of the amount of butter she used. How much sugar, in cups, did she use?

A. $1\frac{1}{4}$ cups

B. $1\frac{1}{3}$ cups

C. $2\frac{1}{2}$ cups

D. $3\frac{5}{12}$ cups

9. A store sells 107 different colors of paint. They have 25 cans of each color in storage. The number of cans of paint the store has in storage can be found using the expression below.

107 × 25

How many cans of paint does the store have in storage?

A. 749

B. 2,675

C. 2,945

D. 4,250

Session 1—Math (No Calculator)

10. Yala brought $\frac{5}{9}$ of a pound of cherries to school. Will brought $\frac{4}{15}$ of a pound of cherries to school. Yala used the expression below to find the difference in the number of pounds of cherries she and Will brought to school.

$$\frac{5}{9} - \frac{4}{15}$$

Which expression shows one way to solve the expression Yala used above?

A. $\frac{5-4}{9-15}$

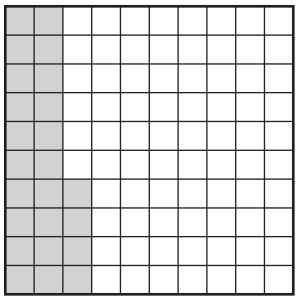
B. $\frac{5-4}{9\times15}$

C. $\frac{11}{15} - \frac{4}{15}$

D. $\frac{25}{45} - \frac{12}{45}$

11. Use the expression and unit grid below to answer the question.

0.24 ÷ 3



What is the value of the expression?

A. 0.08

B. 0.8

C. 1.25

D. 12.5

12. Nick is making two different types of bread. He needs $3\frac{2}{3}$ cups of flour for one type and $5\frac{3}{4}$ cups of flour for the other type. The total amount of flour, in cups, Nick will need to make both types of bread can be found by solving the expression below.

$$3\frac{2}{3} + 5\frac{3}{4}$$

How many cups of flour will Nick need to make both types of bread?

A. $8\frac{1}{2}$ cups

B. $8\frac{5}{7}$ cups

C. $9\frac{5}{12}$ cups

D. $9\frac{7}{12}$ cups

13. At a football game, $\frac{8}{15}$ of the fans wore team T-shirts. Of those wearing team T-shirts, $\frac{1}{4}$ also wore team hats. What fraction of the fans at the football game wore both a team T-shirt and a team hat?

A. $\frac{2}{15}$

B. $\frac{9}{19}$

C. $\frac{7}{11}$

D. $\frac{47}{60}$

14. Add.

$$2\frac{3}{8} + \frac{13}{20}$$

A. $2\frac{16}{28}$

B. $2\frac{128}{160}$

C. $3\frac{1}{40}$

D. $3\frac{41}{40}$

15. Use the equation below to answer the question.

$$0.75 \times 6.5 = m$$

Which expression shows one way to solve the equation?

A. 75 × 65 ÷ 1,000

B. 75 × 650 ÷ 1,000

C. 0.7 × 6 + 0.7 × 5 + 0.5 × 6 + 0.5 × 5

D. 0.7 × 6 + 0.7 × 0.5 + 0.5 × 6 + 0.5 × 0.5

16. Aikong spent $\frac{3}{8}$ of his time studying science. He spent $\frac{2}{5}$ as much time studying English as science. What fraction of Aikong's study time was spent studying English?

A. $\frac{1}{40}$

B. $\frac{3}{20}$

C. $\frac{31}{40}$

D. $\frac{15}{16}$

17. Daniel made a chocolate pie, a cream pie, and an apple pie that were the same size and shape for a celebration. After the celebration the following amounts of pie were remaining:

- $\frac{5}{8}$ of the chocolate pie
- $\frac{1}{6}$ of the cream pie
- $\frac{1}{4}$ of the apple pie

What fraction of a whole pie is remaining?

A. $\frac{7}{24}$ of a pie

B. $\frac{7}{18}$ of a pie

C. $\frac{25}{24}$ pies

D. $\frac{19}{10}$ pies

18. Of the lifeguards working at a swimming pool, $\frac{1}{5}$ of them are new this summer and $\frac{3}{8}$ of them are working there for the second summer in a row. What fraction of the lifeguards are either new or working there for the second summer in a row?

A. $\frac{4}{40}$

B. $\frac{4}{13}$

C. $\frac{23}{40}$

D. $\frac{6}{8}$

19. Philip had basketball practice on 19 days in January. There are 31 days in January. Which expression is equal to the fraction of the total number of days in January that Philip had basketball practice on?

A. $19 \div 31$

B. $31 \div 19$

C. $\frac{19}{31+19}$

D. $\frac{31}{31+19}$

20. Which diagram shows how to correctly multiply 1,234 × 987?

A.

$$\begin{array}{r} 1234 \\ \times\ 987 \\ \hline 8638 \\ 9872 \\ 10806 \\ \hline 1187958 \end{array}$$

B.

$$\begin{array}{r} 1234 \\ \times\ 987 \\ \hline 8638 \\ 9872 \\ 11106 \\ \hline 1217958 \end{array}$$

C.

$$\begin{array}{r} 1234 \\ \times\ 987 \\ \hline 8638 \\ 9672 \\ 11106 \\ \hline 1215958 \end{array}$$

D.

$$\begin{array}{r} 1234 \\ \times\ 987 \\ \hline 7638 \\ 9872 \\ 11106 \\ \hline 1216958 \end{array}$$

21. The distance between Miriam's house and Debbie's house is 444.44 meters. Which statement about the values of the digits in the distance, in meters, between their houses is true?

A. The value of the 4 in the tenths place is $\frac{1}{10}$ the value of the 4 in the tens place.

B. The value of the 4 in the hundredths place is $\frac{1}{10}$ the value of the 4 in the ones place.

C. The value of the 4 in the hundreds place is 10 times greater than the value of the 4 in the ones place.

D. The value of the 4 in the tenths place is 10 times greater than the value of the 4 in the hundredths place.

22. Which situation can be represented by the fraction $\frac{20}{8}$?

A. Leslie spent 20 dollars and 8 cents at a store.
How is the amount of money Leslie spent written as a fraction?

B. Mr. Kramer's 8 grandchildren shared 20 crackers equally.
How many crackers did each grandchild get?

C. Mitch bought 20 containers of flowers at a plant store.
Each container had 8 flowers in it.
How many flowers did Mitch buy?

D. Stamps are sold in booklets of 20 stamps.
Donna used 8 stamps to send invitations for a party.
How many booklets of stamps did Donna use to send her invitations?

23. Mr. Harrison made sandwiches for a picnic. Of the sandwiches he made, $\frac{1}{6}$ of them were turkey sandwiches. Mr. Harrison added cheese to $\frac{1}{2}$ of the turkey sandwiches he made. What fraction of the sandwiches made by Mr. Harrison had both turkey and cheese?

A. $\frac{1}{12}$

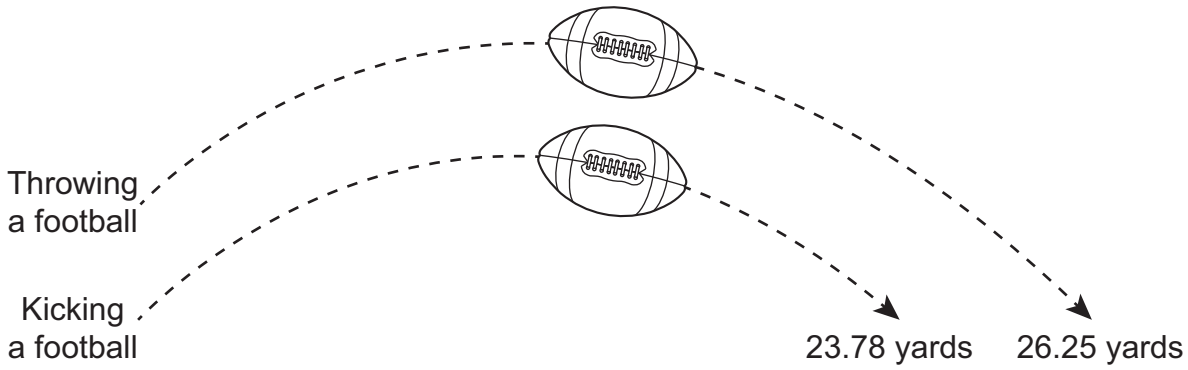
B. $\frac{1}{8}$

C. $\frac{2}{8}$

D. $\frac{4}{6}$

24. Asha measured the distances she threw and kicked a football. A diagram of her results is shown below.

Throwing and Kicking a Football



How much farther, in yards, did she throw the football than kick it?

A. 2.47 yards

B. 2.57 yards

C. 3.53 yards

D. 3.57 yards

25. Use the expression below to answer the question.

$$3 \times [(2 \times 6 - 5) + (8 \div 4)] - 1$$

What is the value of the expression?

A. 9

B. 11

C. 26

D. 32

26. Kayla had $\frac{3}{4}$ of her book left to read on Sunday night. She read $\frac{1}{5}$ of the book Monday afternoon and $\frac{1}{4}$ of the book Monday evening. What fraction of the book did she still have left to read after Monday evening?

A. $\frac{1}{5}$ of the book

B. $\frac{2}{9}$ of the book

C. $\frac{1}{4}$ of the book

D. $\frac{3}{10}$ of the book

27. Gail has a rectangular rug. The diagram below shows the dimensions of Gail's rug.

Gail's Rug

What is the area of Gail's rug?

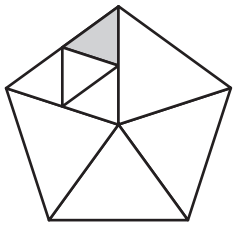
A. $7\frac{3}{4}$ square feet

B. $10\frac{3}{4}$ square feet

C. $13\frac{3}{4}$ square feet

D. $15\frac{1}{2}$ square feet

28. Soki used the model below to represent a situation.



Which situation could Soki's model represent?

A. Soki has $5 in quarters. There are 4 quarters in one dollar. How many quarters does Soki have in all?

B. Soki has a rope that is 5 yards long. She cuts the rope into 4 equal length pieces. Soki uses all of the rope. How long, in yards, is each piece of rope?

C. Of Soki's friends, 5 of them each have $\frac{1}{4}$ of a pound of gummy bears. The 5 friends combine the gummy bears. How many pounds of gummy bears do Soki's 5 friends have in total?

D. Soki has $\frac{1}{5}$ of a gallon of paint remaining. She puts all of the remaining paint into 4 jars. Each jar contains the same amount of paint. How much paint, in gallons, does Soki put into each jar?

29. Zeik is cooking $\frac{1}{3}$ of a bag of rice for a meal. He will give each of his 4 guests the same amount of rice. Zeik is not eating any rice. What is the maximum fraction of the bag of rice Zeik could give each of his 4 guests?

A. $\frac{1}{12}$

B. $\frac{4}{12}$

C. $\frac{3}{4}$

D. $\frac{4}{3}$

30. A sporting goods store shipped baseballs to schools. It shipped a total of 756 baseballs to 21 schools. Each school received the same number of baseballs. The model shown below calculates the number of baseballs shipped to each school.

	10	10	10	3	3
21	210	210	210	63	63

756	546	336	126	63
– 210	– 210	– 210	– 63	– 63
546	336	126	63	0

How many baseballs were shipped to each school?

A. 33 baseballs

B. 36 baseballs

C. 57 baseballs

D. 63 baseballs

STOP

Math—Sessions 1, 2, and 3
GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

Session 2—Math (Calculator)

Write your answers for questions 31 through 50 in the spaces provided on page 35, session 2 answer sheet. Write only one answer for each question. You may work problems in your test booklet or on scratch paper, but you must mark your answer on your answer sheet. You may review your work in this session, but do not work on any other session.

You MAY use a calculator for this session.

31. Of the cans of soup in Rolando's cupboard, $\frac{1}{2}$ are tomato and $\frac{2}{5}$ are chicken noodle. What fraction of the cans of soup in Rolando's cupboard are either tomato or chicken noodle?

A. $\frac{3}{7}$

B. $\frac{3}{5}$

C. $\frac{7}{10}$

D. $\frac{9}{10}$

32. Mr. Lucci put together 5 bags of pens. He put 19 black pens and 12 red pens in each bag. Which expression shows the total number of pens Mr. Lucci put into bags?

A. $(5 \times 19) + 12$

B. $5 \times (19 + 12)$

C. $5 + (19 \times 12)$

D. $(5 + 19) \times 12$

Session 2—Math (Calculator)

33. A baseball team sold 215 youth tickets for $3 each and 467 adult tickets for $7 each. Which expression can be used to find how much more money the baseball team made on adult tickets than on youth tickets?

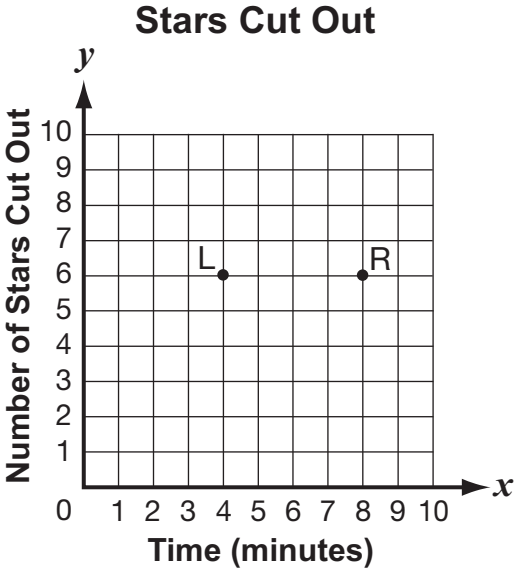
A. (215 × 3) – (467 × 7)

B. (215 × 7) – (467 × 3)

C. (467 × 3) – (215 × 7)

D. (467 × 7) – (215 × 3)

34. Lovelle and Rachel are cutting out stars to decorate a poster. In the graph below, Lovelle's progress is represented by the point L, and Rachel's progress is represented by the point R.



Which statement about Lovelle and Rachel's progress is true?

A. Rachel cut out 8 stars in 6 minutes.

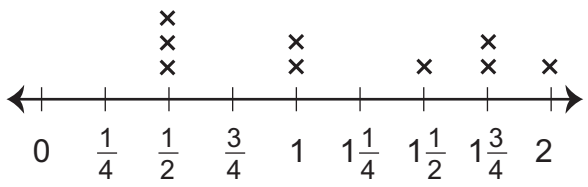
B. Lovelle cut out 6 stars in 4 minutes.

C. Rachel cut out 4 more stars than Lovelle.

D. Lovelle and Rachel cut the same number of stars in 6 minutes.

Session 2—Math (Calculator)

35. Deepak and his friends kept track of how much their height increased, in inches, over the past year. The line plot below shows this information.



Height Increase (inches)

A year ago Deepak was $52\frac{1}{4}$ inches tall. Which height could he be now?

A. $52\frac{1}{2}$ inches

B. 53 inches

C. $53\frac{1}{2}$ inches

D. 54 inches

36. A gas station sold 300.5849 gallons of gas in a day. How many gallons of gas did the gas station sell, rounded to the nearest hundredth?

A. 300

B. 300.58

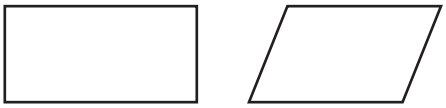
C. 300.585

D. 300.59

Session 2—Math (Calculator)

37. Which two quadrilaterals have **both** 2 pairs of parallel sides and 2 acute angles?

A. 

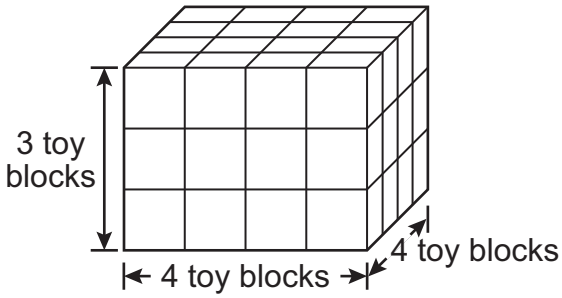
B. 

C. 

D. 

38. Veronica stacked toy blocks to form the shape shown below.

Veronica's Stack of Toy Blocks



How many toy blocks are in Veronica's stack of toy blocks?

A. 11

B. 30

C. 40

D. 48

Session 2—Math (Calculator)

39. A small bat weighs about $\frac{2}{5}$ of an ounce. A small hummingbird weighs about $\frac{14}{25}$ of an ounce. Which set of statements explains how to find the difference in the weights of these animals?

A. Multiply the numerator and denominator of $\frac{2}{5}$ by 5.
Subtract 10 from 14 to get the numerator.
Use 25 as the denominator.

B. Multiply the numerator and denominator of $\frac{2}{5}$ by 5.
Subtract 10 from 14 to get the numerator.
Subtract 25 from 25 to get the denominator.

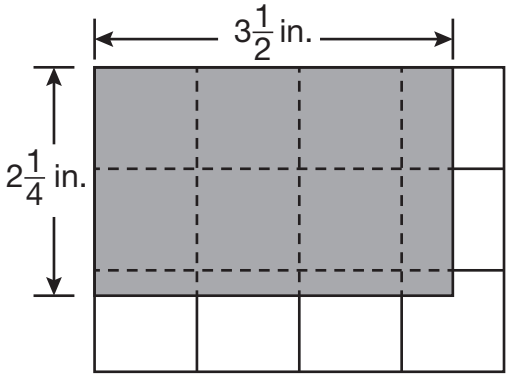
C. Multiply the denominator of $\frac{2}{5}$ by 5.
Subtract 2 from 14 to get the numerator.
Use 25 as the denominator.

D. Multiply the numerator of $\frac{2}{5}$ by 5.
Subtract 10 from 14 to get the numerator.
Subtract 5 from 25 to get the denominator.

Session 2—Math (Calculator)

40. Quincy laid a gray playing card on a grid as shown in the diagram below.

Gray Playing Card



He used the grid to help him find the area of the gray playing card. What is the area, in square inches, of the gray playing card Quincy laid on the grid?

A. $5\frac{3}{4}$ square inches

B. $6\frac{3}{4}$ square inches

C. $7\frac{7}{8}$ square inches

D. $11\frac{1}{2}$ square inches

41. The cargo weight in Morten's truck cannot be greater than 3 tons. He has 5,000 pounds of cargo in his truck. What is the greatest amount of cargo weight Morten can add without going over the weight limit?

A. 2 tons

B. 5.5 tons

C. 1,000 pounds

D. 2,000 pounds

Session 2—Math (Calculator)

42. Which statement is true?

A. All hexagons are triangles because they have at least 3 sides.

B. All octagons are polygons because they have at least 3 sides.

C. All parallelograms are rectangles because they have 2 sets of parallel sides.

D. All rhombi are squares because they have 4 sides that are all the same length.

43. Janelle is sending a package to her friend. She needs to calculate how much the contents of the package weigh. Janelle uses the table below to find the total weight of the contents of the package.

Contents of Janelle's Package

Object	Weight
Pad of paper and a pencil	8 oz.
Coloring book	5 oz.
Dictionary	2 lb.
Toy	11 oz.

What is the total weight of the contents of the package?

A. 3 lb. 8 oz.

B. 5 lb. 6 oz.

C. 26 oz.

D. 56 lb.

44. Last month Ellen was in school for 116 hours. Each school day is 6 hours long. How many school days was Ellen in school last month?

A. $\frac{6}{122}$

B. $\frac{6}{116}$

C. $\frac{116}{6}$

D. $\frac{122}{6}$

Session 2—Math (Calculator)

45. Andrea has $\frac{1}{4}$ of a sack of rice. She divides the rice equally into 7 bags. What fraction of the full sack of rice is in each bag?

A. $\frac{1}{28}$

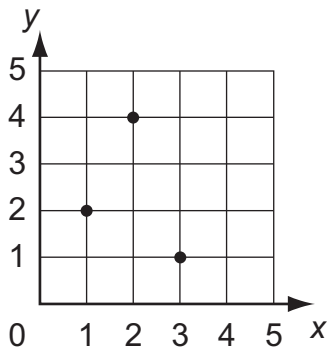
B. $\frac{1}{7}$

C. $\frac{2}{11}$

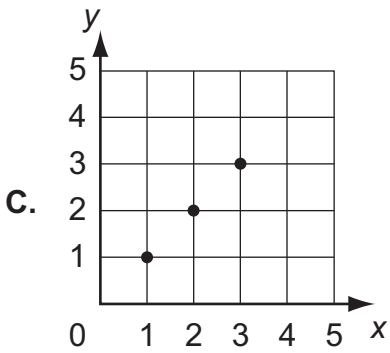
D. $\frac{11}{28}$

46. Which coordinate grid shows the points (1, 2), (2, 4), and (3, 1) graphed correctly?

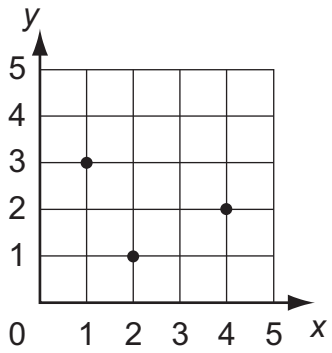
A.



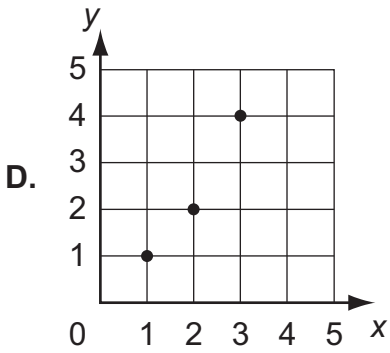
C.



B.



D.



Session 2—Math (Calculator)

47. On Sunday, Doug started recording how many minutes he had read for the week. He also started recording how many minutes he had practiced the trumpet for the week. The table below shows the totals for the first four days.

Time Spent Practicing the Trumpet and Reading This Week

Day	Total Minutes Spent Reading	Total Minutes Spent Practicing Trumpet
Sunday	12	15
Monday	24	30
Tuesday	36	45
Wednesday	48	60

Both patterns continue. Which statement about the patterns created by the numbers of minutes Doug has spent reading and practicing his trumpet this week is true?

A. The number 90 will appear in both patterns.

B. Both patterns switch back and forth between even and odd numbers.

C. The sum of the corresponding terms in the patterns is always divisible by 3.

D. The difference between corresponding terms in the patterns is always a multiple of 6.

48. A bag of dried fruit weighs three hundred twenty-six thousandths of a pound. What is the weight of the bag of dried fruit, in pounds, written in expanded form?

A. $3 \times \frac{1}{10} + 2 \times \frac{1}{100} + 6 \times \frac{1}{1,000}$

B. $3 \times \frac{1}{1,000} + 2 \times \frac{1}{100} + 6 \times \frac{1}{10}$

C. $3 \times 100 + 2 \times 10 + 6 \times 1$

D. $3 \times 100,000 + 2 \times 10,000 + 6 \times 1,000$

Session 2—Math (Calculator)

49. A scientist measured the diameters of four human hairs. The diameters, in millimeters, were 0.091, 0.169, 0.17, and 0.023. Which inequality correctly compares the diameters of two of the human hairs?

A. $0.17 > 0.023$

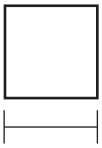
B. $0.091 < 0.023$

C. $0.169 > 0.17$

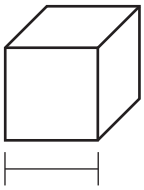
D. $0.17 < 0.091$

50. Which figure most likely has a volume of 1 cubic unit?

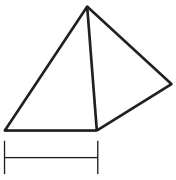
A.



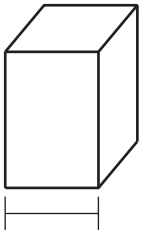
C.



B.



D.



STOP

Math—Sessions 1, 2, and 3
GENERAL INSTRUCTIONS

The Math test has three sessions, two with multiple-choice questions and one with constructed-response questions. You may **not** use a calculator for session 1, but you may use a calculator for sessions 2 and 3.

Session 3—Math (Calculator)

Write your answers for questions 51 and 52 in the spaces provided below. The questions have more than one part. Show all the work you do to find your answers. Even if you cannot answer all parts, answer as many as you can. You may still get points for answering part of a question. Be sure to write clearly. You may review your work in this session, but do not work on any other session.

You MAY use a calculator for this session.

51. Craig has a yellow jug, a red jug, and a blue jug. The blue jug holds $\frac{2}{3}$ of a gallon.

A. Maritza has a blue jug that holds $\frac{6}{9}$ of a gallon. Craig says that his blue jug holds the same amount as Maritza's blue jug. He uses the equation below to support his statement.

$$\frac{2}{3} \times \frac{3}{3} = \frac{6}{9}$$

Explain why Craig's equation supports his statement.

B. To find how much the yellow jug holds, Craig multiplies the amount his blue jug holds by a number greater than 1 but less than 2. To find how much the red jug holds, Craig multiplies the amount his blue jug holds by a number greater than 0 but less than 1. Write the colors of the jugs in order from **least** to **greatest** on the lines below based on how many gallons they each hold.

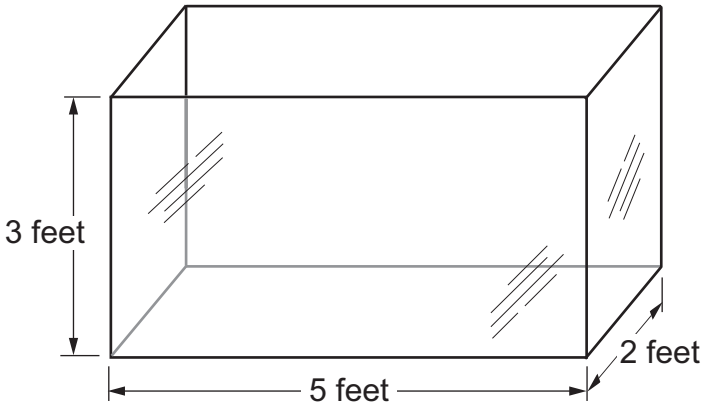
_____, _____, _____

Explain or show how you determined the sizes of the red and yellow jug in comparison to the blue jug.

Session 3—Math (Calculator)

52. Kelsey has a fish tank in the shape of a rectangular prism. A diagram of her fish tank is shown below.

Kelsey's Fish Tank

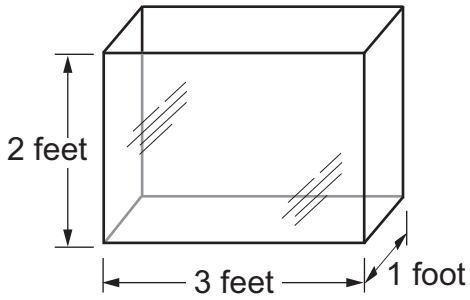


A. What is the volume, in cubic feet, of Kelsey's fish tank?

_____ cubic feet

B. Martin has two fish tanks, each in the shape of a rectangular prism. The total volume of his two fish tanks is equal to the volume of Kelsey's fish tank. The first of Martin's fish tanks has a length of 3 feet, a width of 1 foot, and a height of 2 feet, as shown in the diagram below.

Martin's First Fish Tank



List two unique sets of dimensions that could represent the dimensions of Martin's second fish tank.

C. Pia also has a fish tank. The volume of her tank is greater than that of Martin's second fish tank but less than that of Kelsey's fish tank. The area of the bottom of Pia's fish tank is 7 square feet. What is one possible height, in feet, of Pia's fish tank?

_____ feet

STOP

Multiple-Choice Answer Sheet

Name: _____

Session 1

1. _____	16. _____
2. _____	17. _____
3. _____	18. _____
4. _____	19. _____
5. _____	20. _____
6. _____	21. _____
7. _____	22. _____
8. _____	23. _____
9. _____	24. _____
10. _____	25. _____
11. _____	26. _____
12. _____	27. _____
13. _____	28. _____
14. _____	29. _____
15. _____	30. _____

Multiple-Choice Answer Sheet

Name: _____

Session 2

31. _____	**41.** _____
32. _____	**42.** _____
33. _____	**43.** _____
34. _____	**44.** _____
35. _____	**45.** _____
36. _____	**46.** _____
37. _____	**47.** _____
38. _____	**48.** _____
39. _____	**49.** _____
40. _____	**50.** _____

iLEAP MATHEMATICS REFERENCE SHEET—GRADE 5

Use the information below to answer questions on the Math test.

U.S. Unit Conversions
1 foot = 12 inches
1 yard = 3 feet
1 mile = 5,280 feet

1 pound = 16 ounces
1 ton = 2,000 pounds

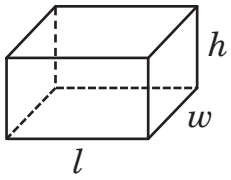
1 minute = 60 seconds
1 hour = 60 minutes
1 day = 24 hours

Metric Unit Conversions
1 meter = 1,000 millimeters
1 meter = 100 centimeters
1 kilometer = 1,000 meters

1 liter = 1,000 milliliters

1 kilogram = 1,000 grams

Rectangular Prism



Volume = $l \times w \times h$
Volume = B $\times$ h
B = $l \times w$

Multiple-Choice Answer Key

Name: _____

Session 1

1.	D	16.	B
2.	D	17.	C
3.	C	18.	C
4.	A	19.	A
5.	D	20.	B
6.	C	21.	D
7.	C	22.	B
8.	A	23.	A
9.	B	24.	A
10.	D	25.	C
11.	A	26.	D
12.	C	27.	C
13.	A	28.	D
14.	C	29.	A
15.	A	30.	B

Multiple-Choice Answer Key

Name: _____

Session 2

31.	D	41.	C
32.	B	42.	B
33.	D	43.	A
34.	B	44.	C
35.	D	45.	A
36.	B	46.	A
37.	C	47.	C
38.	D	48.	A
39.	A	49.	A
40.	C	50.	C

Constructed-Response Scoring Rubrics

Session 3

51.

Scoring Rubric	
4	The student earns 4 points.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point OR demonstrates minimal understanding of the standard being measured.
0	The student's response is incorrect, irrelevant to the skill or standard being measured, or blank.

Sample Answer:

Part A. The fraction $\frac{3}{3} = 1$. When you multiply something by 1 the value does not change, so $\frac{2}{3} = \frac{6}{9}$.

Part B. **red, blue, yellow**; I know the yellow one holds more than the blue one because to find out how much the yellow jug holds, Craig multiplied $\frac{2}{3}$ by a number bigger than 1, so the answer will be bigger than $\frac{2}{3}$. I know the red one holds less than the blue one because Craig multiplied $\frac{2}{3}$ by a number greater than 0 but less than 1, so the red one must hold less than $\frac{2}{3}$.

Points Assigned:

Part A. 1 point
1 point for giving complete and accurate work or explanation of why Craig is correct

Part B. 3 points
1 point for the correct order (red, blue, yellow)
AND
1 point for giving complete and accurate work or explanation for yellow
AND
1 point for giving complete and accurate work or explanation for red

52.

Scoring Rubric	
4	The student earns 4 points.
3	The student earns 3 points.
2	The student earns 2 points.
1	The student earns 1 point OR demonstrates minimal understanding of the standard being measured.
0	The student's response is incorrect, irrelevant to the skill or standard being measured, or blank.

Sample Answer:

Part A. 30

Part B. Any two of the following sets of dimensions regardless of the order of the numbers in the set:
(1, 3, 8), (1, 2, 12), (1, 1, 24), (1, 4, 6), (2, 6, 2), (3, 4, 2), (fractional lengths that multiply to 24)

Part C. 4 feet (any length, in feet, between $\frac{24}{7}$ and $\frac{30}{7}$ is correct)

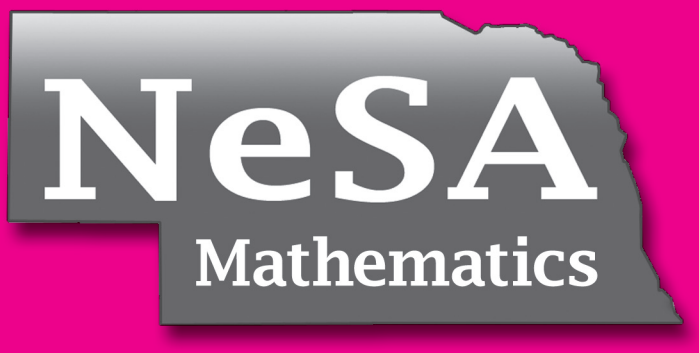
Points Assigned:

Part A. 1 point
1 point for correct answer

Part B. 2 points
1 point for a correct answer [The student writes a set of dimensions for a rectangular prism that has a product equal to 24.]
AND
1 point for a correct answer [The student writes a set of dimensions for a rectangular prism that has a product equal to 24 that does NOT use the same 3 numbers as the first answer given.]

Part C. 1 point
1 point for a correct answer

Note: Scorers should follow along with the student's work throughout. If the student makes an error in a previous part and subsequent answers are correct based on the earlier error, the student should not be penalized again.



Nebraska State Accountability

Grade 5

Mathematics

Practice Test

Name:

Nebraska Department of Education 2010

Directions:

On the following pages are multiple-choice questions for the Grade 5 Practice Test, a practice opportunity for the *Nebraska State Accountability–Mathematics (NeSA–M).*

Each question will ask you to select an answer from among four choices.

For all questions:

- Read each question carefully and choose the best answer.
- You may use scratch paper to solve the problems.
- The Mathematics Reference Sheet is provided in the back of the test booklet. You may refer to this page any time during the test.
- You may not use a calculator on this test.
- Be sure to answer ALL the questions.

Remember only one of the answers provided is the correct response.

STOP.

1. Evan wants to measure the length of his room. Which unit of measure is appropriate to measure the length of his room?

   A. centimeter

   B. foot

   C. inch

   D. millimeter

2. What is $\frac{3}{9}$ in simplest form?

   A. $\frac{1}{3}$

   B. $\frac{1}{2}$

   C. $\frac{3}{6}$

   D. $\frac{6}{18}$

3. Mrs. Perkins makes study guides for her class of 21 students. She uses 252 sheets of paper. How many sheets of paper are in each study guide?

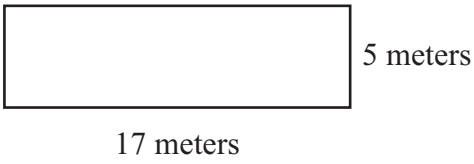
   A. 12 sheets

   B. 231 sheets

   C. 273 sheets

   D. 5,292 sheets

4. **Use the rectangle below to answer the question.**



What is the area of the rectangle?

A. 12 square meters

B. 22 square meters

C. 44 square meters

D. 85 square meters

5. Which equation shows how to multiply $6 \times 5 \times 3$ using the associative property?

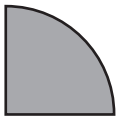
A. $6 \times 5 \times 3 = 3 \times 5 \times 6$

B. $(6 \times 3) + 5 = 6 \times (3 + 5)$

C. $(6 \times 5) \times 3 = 6 \times (5 \times 3)$

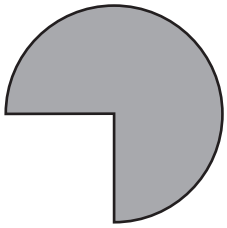
D. $(6 \times 5) + (6 \times 3) = (6 \times 3) + (6 \times 5)$

6. Which picture shows 180° of a circle?

A. 

B. 

C. 

D. 

7. Each time John goes to the movies he spends \$7.00. Which expression shows how much he spends after going to the movies t times?

A. $t + \$7.00$

B. $t - \$7.00$

C. $\$7.00 \times t$

D. $\$7.00 - t$

8. What is $92.53 \div 10$?

   A. 0.9253
   B. 9.253
   C. 92.53
   D. 925.3

9. In the expression $15 - n$, which value of n results in the greatest difference?

   A. $n = 0$
   B. $n = 5$
   C. $n = 10$
   D. $n = 15$

10. What is the value of w in the equation $116 - w = 95$?

   A. $w = 19$
   B. $w = 21$
   C. $w = 210$
   D. $w = 211$

11. What is the standard form of twenty-one and six hundred thirty-four thousandths?

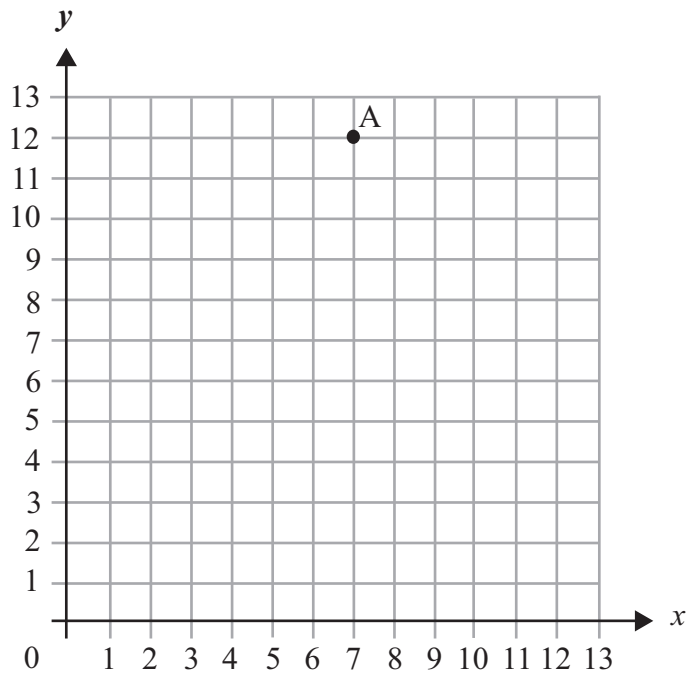
    A. 21.60034

    B. 21.6034

    C. 21.634

    D. 2,160,034

12. **Use the coordinate grid below to answer the question.**



What are the coordinates of Point A?

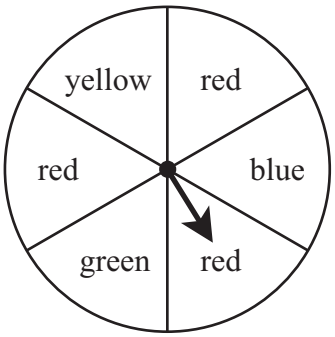
A. (11, 6)

B. (12, 7)

C. (6, 11)

D. (7, 12)

13. **Use the spinner below to answer the question.**



What are all the possible outcomes for the spinner?

A. red, blue, red, green

B. yellow, red, blue, red

C. red, blue, yellow, green

D. yellow, red, blue, yellow

14. Which is the correct sum?

$$\begin{array}{r} 2.34 \\ +\ 1.7 \\ \hline \end{array}$$

A. 2.51

B. 3.04

C. 3.14

D. 4.04

15. **Use the table below to answer the question.**

Ashley's Grocery List

toothpaste	$3.99
bread	$2.45
milk	$2.69
apples	$3.10
cereal	$4.89

Ashley goes to the grocery store to buy each of the items on her list. Ashley rounds the cost of each item to the nearest dollar. What is the estimated total cost of these items?

A. $15.00

B. $16.00

C. $17.00

D. $18.00

16. Which percent equals $\frac{1}{4}$?

A. 14%

B. 25%

C. 41%

D. 52%

17. **Use the expression below to answer the question.**

$$53 \times 24$$

How can the distributive property be used to solve this expression?

A. $(50 + 20) \times (3 + 4)$

B. $(5 \times 2) + (3 \times 4)$

C. $(53 + 4) \times (53 + 2)$

D. $(53 \times 20) + (53 \times 4)$

18. Which list is in order from least to greatest?

A. 1,000; 1,010; 1,009

B. 1,010; 1,011; 1,100

C. 1,100; 1,010; 1,001

D. 1,010; 1,100; 1,001

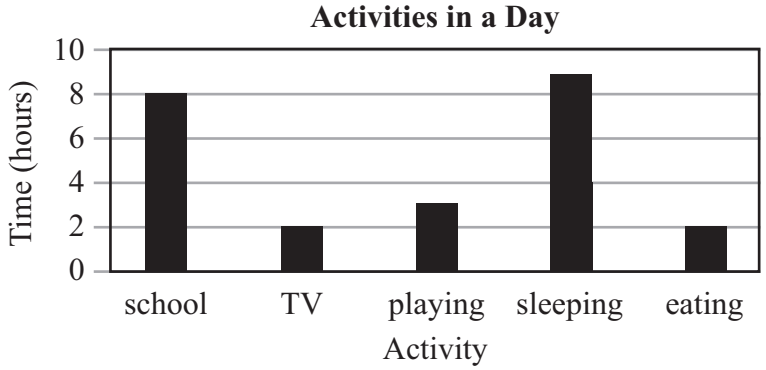
19. Which is a composite number?

    A. 5
    B. 7
    C. 19
    D. 21

20. What is 3.8×10?

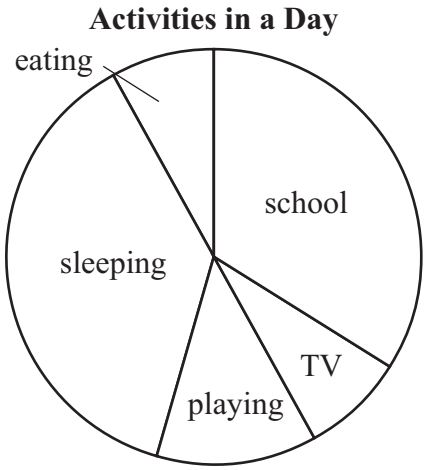
    A. 0.38
    B. 3.80
    C. 38
    D. 380

21. **Use the graph below to answer the question.**

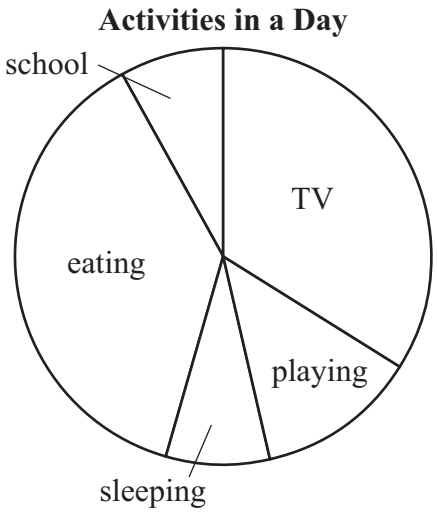


Which circle graph could represent the information in the bar graph?

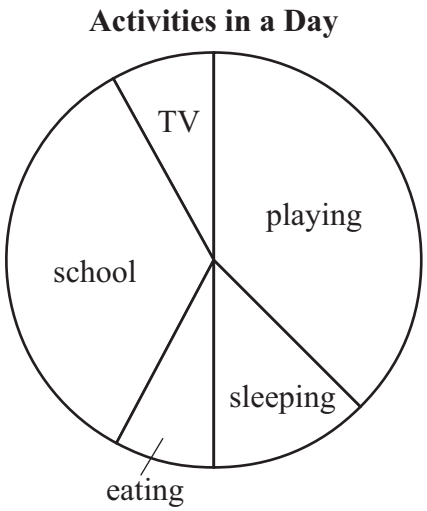
A.



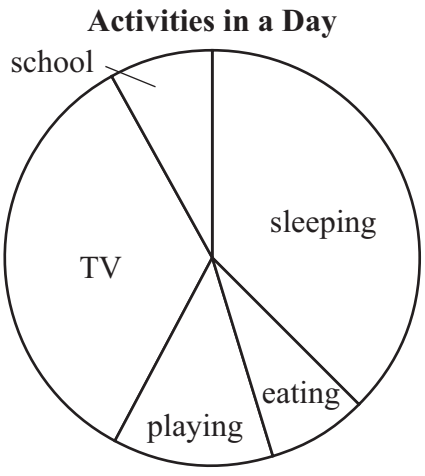
B.



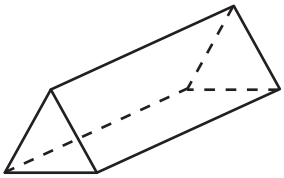
C.



D.



22. **Use the picture below to answer the question.**



How many faces does the prism have?

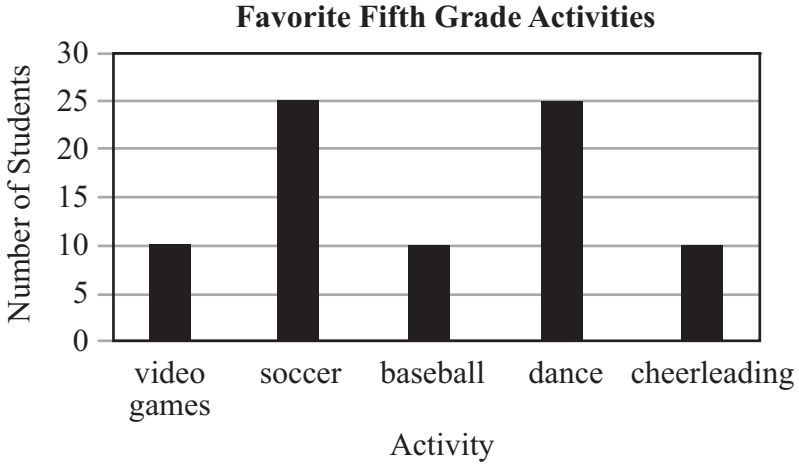
A. 3 faces

B. 4 faces

C. 5 faces

D. 6 faces

23. **Use the bar graph below to answer the question.**



A teacher asked the fifth graders about their favorite activities. What is the total number of fifth graders represented on the graph?

A. 10

B. 25

C. 65

D. 80

24. What is the value of $12 - (3 + 5)$?

A. 4

B. 10

C. 14

D. 20

NeSA-M Grade 5 Reference Sheet

Shape	Area	Perimeter
Rectangle	$A = l \times w$	$P = 2l + 2w$
Square	$A = s \times s$	$P = s + s + s + s$

Key	
l = length	s = side length
w = width	

Standard Units	Metric Units
Conversions – Length	
1 foot (ft) = 12 inches (in.)	1 centimeter (cm) = 10 millimeters (mm)
1 yard (yd) = 3 feet (ft) = 36 inches (in.)	1 meter (m) = 100 centimeters (cm)
1 mile (mi) = 1,760 yards (yd) = 5,280 feet (ft)	1 meter (m) = 1,000 millimeters (mm)
	1 kilometer (km) = 1,000 meters (m)
Conversions – Volume	
1 cup = 8 fluid ounces (fl oz)	1 liter (l) = 1,000 milliliters (ml)
1 pint (pt) = 2 cups	1 liter (l) = 1,000 cubic centimeters (cu. cm)
1 quart (qt) = 2 pints (pt)	
1 gallon (gal.) = 4 quarts (qt)	
Conversions – Weight/Mass	
1 pound (lb) = 16 ounces (oz)	1 gram (g) = 1,000 milligrams (mg)
1 ton = 2,000 pounds (lb)	1 kilogram (kg) = 1,000 grams (g)

Grade 5 Practice Test
Answer Key

Number	Key
1	B
2	A
3	A
4	D
5	C
6	B
7	C
8	B
9	A
10	B
11	C
12	D
13	C
14	D
15	C
16	B
17	D
18	B
19	D
20	C
21	A
22	C
23	D
24	A

SAMPLE TEST

MATHEMATICS

2007 Oregon Content Standards
Grades 3 - 8

OFFICE OF
ASSESSMENT & INFORMATION SERVICES
THE OREGON DEPARTMENT OF EDUCATION

It is the policy of the State Board of Education and a priority of the Oregon Department of Education that there will be no discrimination or harassment on the grounds of race, color, sex, marital status, religion, national origin, age or handicap in any educational programs, activities, or employment. Persons having questions about equal opportunity and nondiscrimination should contact the State Superintendent of Public Instruction at the Oregon Department of Education.

Office of Assessment & Information Services
Oregon Department of Education
255 Capitol Street NE
Salem, OR 97310
(503) 947-5600

Susan Castillo
State Superintendent of Public Instruction

Doug Kosty
Assistant Superintendent

Tony Alpert
Director, Assessment and Evaluation

Steve Slater
Manager, Scoring, Psychometrics and Validity

Kathleen Vanderwall
Manager, Test Design and Administration

Holly Carter
Assessment Operations and Policy Analyst

Ken Hermens
Language Arts Assessment Specialist

Leslie Phillips
Science and Social Sciences Assessment Specialist

James Leigh
Mathematics Assessment Specialist

Dianna Carrizales
Director, Monitoring, Systems, and Outcomes

Bradley J. Lenhardt
Monitoring and Assessment Specialist

Sheila Somerville
Electronic Publishing Specialist

Kathy Busby
Project Manager

INTRODUCTION TO
MATHEMATICS KNOWLEDGE AND SKILLS
GRADE-LEVEL SAMPLE TESTS

BACKGROUND

The Oregon Department of Education provides sample tests to demonstrate the content and types of questions students in grades 3, 4, 5, 6, 7, 8, and High School might encounter on the Oregon Assessment of Knowledge and Skills (multiple-choice), which is administered each year.

ELIGIBLE CONTENT

These sample questions were taken from tests given in previous years. They were originally written to align to the 2002 Oregon Mathematics Grade-level Contnet Standards. A panel of content experts studied the items and selected the ones which best align to the 2007/2009 Mathematics Content Standards for grades 3-8 and high school. New for 2010-11, scores are reported out at three Score Reporting Categories each year. The titles of these SRCs changes from year to year, but describes the content for each year in general terms. The chart shows the SRCs for all grade levels.

	Score Reporting Category 1	Score Reporting Category 2	Score Reporting Category 3
3	**3.1 : Number and Operations**	**3.2 : Number and Operations, Algebra, and Data Analysis**	**3.3 : Geometry and Measurement**
4	**4.1 : Number and Operations**	**4.2 : umber and Operations and Algebra**	**4.3 : Measurement**
5	**5.1 : Number and Operations and Data Analysis**	**5.2 : Number and Operations and Algebra**	**5.3 : Geometry, Measurement, and Algebra**
6	**6.1 : Number and Operations**	**6.2 : Number and Operations and Probability**	**6.3 : Algebra**
7	**7.1 : Number and Operations and Algebra**	**7.2 : Number and Operations, Algebra and Geometry**	**7.3 : Measurement and Geometry**
8	**8.1 : Algebra**	**8.2 : Data Analysis and Algebra**	**8.3 : Geometry and Measurement**
HS	**H.A : Algebra and Numeracy**	**H.G : Geometry**	**H.S : Data Analysis**

As in the operational assessment, students are **strongly encouraged** to use the calculator with which they are most familiar when taking the sample test.

The answer key provided at the end of the sample test booklet identifies which of these categories each question is designed to assess. Because the item calibrations (RIT) are not accurate for the new standards, we are not able to provide a Raw-to-RIT chart as we had in the past.

The same weighting across the three Score Reporting Categories of mathematics content is used in both sample and operational tests, as much as possible. This chart shows the approximate percent weighting of SRCs by grade level:

Grade	Score Reporting Category 1	Weight	Score Reporting Category 2	Weight	Score Reporting Category 3	Weight
3	Number and Operations	**35%**	Number and Operations, Algebra, and Data Analysis	**35%**	Geometry and Measurement	**30%**
4	Number and Operations	**35%**	Number and Operations and Algebra	**35%**	Measurement	**30%**
5	Number and Operations and Data Analysis	**35%**	Number and Operations and Algebra	**35%**	Geometry, Algebra, and Measurement	**30%**
6	Number and Operations	**35%**	Number and Operations and Probability	**35%**	Algebra	**30%**
7	Number and Operations and Algebra	**35%**	Number and Operations, Algebra and Geometry	**35%**	Measurement and Geometry	**30%**
8	Algebra	**40%**	Data Analysis and Algebra	**30%**	Geometry and Measurement	**30%**
HS	Algebra	**50%**	Geometry	**30%**	Statistics	**20%**

WHY PROVIDE STUDENTS WITH A SAMPLE TEST?

Most students feel some anxiety as they approach a test. It is important that students know what to expect when they take the OAKS tests. The sample tests are intended to help students approach the state tests with confidence – comfortable with the test format and familiar with test-taking strategies to help them achieve the best possible score.

CONTENTS OF THE SAMPLE TEST:

This overview of the purpose for sample tests is followed by a list of test-taking tips. The sample test formatting is similar to that of the operational OAKD Online mathematics test. A "fill-in-the-bubble" answer sheet for the students to use follows the actual sample test. The answer key identifies the correct answer, the score reporting category represented, and the code of the content standard to which the item aligns. The sample test has fewer items than the actual assessment, and may not be used in place of the operational assessment.

USING THE SAMPLE TEST:

Teachers often have their students take the test as a "practice" activity in preparation for the actual Statewide Assessment. The answer key could be removed prior to making copies of the sample test for student practice. Copies of the answer key could then be provided to students to check their work or to take home and share with parents.

It is important to remember that **students are encouraged to use their calculators and any mathematics manipulatives** on the test. Providing these tools in class and encouraging students to use them during the sample test may be very beneficial in encouraging students to take their time and use the appropriate tools to help them solve problems during the actual test administration. In fact, teachers may want to demonstrate how various tools could be used to solve the multiple-choice problems as part of the practice test activities.

Teachers may use the overall class results to target areas of instruction needing further attention.

Parents may find the sample test helpful in clarifying the types of questions their child will encounter on the multiple-choice test. Parents could also assist their child in preparing for the test by practicing at home. The list of test-taking tips gives parents suggestions on ways to reduce test anxiety and promote good study and health habits in preparation for testing.

Students may wish to use the test independently to practice before the actual test administration, checking their own responses against the answer key provided at the end of the booklet. Students may benefit from re-reading the problems and analyzing both the correct and incorrect answers to the multiple-choice questions they missed.

Building principals, superintendents, district testing coordinators, curriculum leaders and others may find the sample test useful in communicating with parents, school site councils, and other community members. Parts of the sample test could be included in a newsletter or shared at meetings of local community groups to help constituents better understand the state assessment system. Although the sample tests are not as comprehensive as the complete tests administered in the Statewide Assessment, they do provide a **sampling** of the subject area content and difficulty levels students may encounter as a part of Oregon's high academic standards.

Assessment Conditions

If the practice test is to be administered in "test-like" conditions, the following steps need to be followed:

- post a "testing, do not disturb" sign on the window or door of the classroom
- go over any directions (e.g., students are to complete the entire test or only a portion of the test at one sitting)
- expect the students to work by themselves with no talking during the assessment
- monitor student activities during the assessment
- provide any of the appropriate accommodations or modifications students use during instruction and might need during testing
- expect all students to participate

TEST-TAKING TIPS

BEFORE THE TEST

- Develop a positive attitude. Tell yourself, "I will do my best on this test."
- Get a good night's sleep the night before the test.
- Get up early enough to avoid hurrying to get ready for school.
- Eat a good breakfast (and lunch, if your test is in the afternoon).

DURING THE TEST

- Stay calm.
- Listen carefully to directions.
- Read each test question and all the answer choices carefully.
- Eliminate any obvious wrong answers
- Solve the problem using paper and pencil, a calculator or by using manipulatives. See if your answer is similar to one of the choices given.
- Pace yourself. If you come to a difficult question, it may be better to skip it and go on. Then come back and focus on the difficult questions one at a time.
- Just like the Statewide Assessment, this is not a timed test. If you need more time to finish the test, notify your teacher.
- Remember the test questions are not necessarily arranged by difficulty. If you get to a question you think is too hard, that doesn't mean the rest of the test questions will also be too hard.
- The teachers who write the test questions use "commonly made mistakes" to identify good distractors, so finding an answer like yours is not a guarantee that it is the correct answer.
- If you are not sure of an answer to a question, try these tips:
  - ◊ Cross out the answers you know are not correct and choose among the rest.
  - ◊ Read through all the answers very carefully, and then go back to the question. Sometimes you can pick up clues just by thinking about the different answers you have to choose from.
  - ◊ If you get stuck on a question, skip it and come back later.
  - ◊ It is OK to guess on this test. Try to make your best guess, but make sure you answer all questions.

AFTER THE TEST

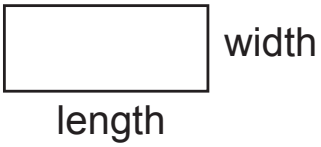
- Before you turn your test in, check it over. Change an answer only if you have a good reason. Generally it is better to stick with your first choice.
- Make sure you have marked an answer for every question, even if you had to guess.

ADDITIONAL INFORMATION on mathematics assessment may be obtained by contacting James Leigh, Mathematics Assessment Specialist, email to: James.Leigh@state.or.us

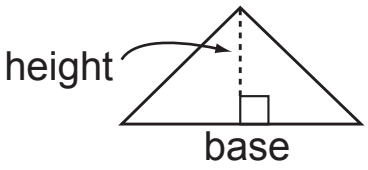
MEASUREMENTS

1 meter = 100 centimeters	1 gram = 1000 milligrams	1 liter = 1000 cubic centimeters
1 kilometer = 1000 meters	1 kilogram = 1000 grams	
1 yard = 3 feet	1 pound = 16 ounces	1 cup - 8 fluid ounces
1 mile = 5280 feet	1 ton - 2000 pounds	1 pint = 2 cups
1 hour = 60 minutes		1 quart = 2 pints
1 minute = 60 seconds		1 gallon = 4 quarts

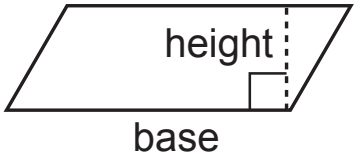
AREA



Area = length × width

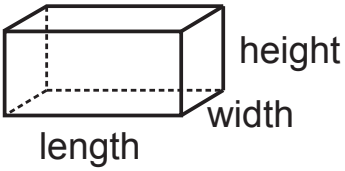


Area = base × height ÷ 2



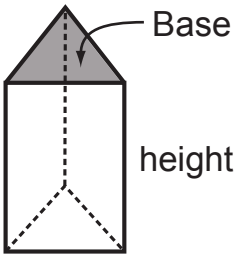
Area = base × height

SURFACE AREA and VOLUME



Surface Area = sum of area of all faces

Volume = length × width × height

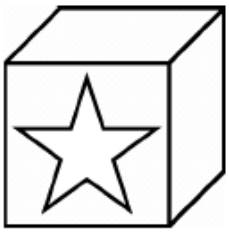


Surface Area = Sum of Areas of all faces

Volume = Area of Base × height

2010-2013 Mathematics Sample Test – Grade 5

1. Becky put a sticker on each face of a blank cube.
   How many stickers did Becky use in all?



   A. 1
   B. 4
   C. 6
   D. 8

2. What is the sum of 76.21 and 21.34?

   A. 1,626.34
   B. 97.55
   C. 54.8
   D. 3.57

3. How many faces are there on a cube?

   A. 8
   B. 6
   C. 4
   D. 2

4. Which of these would most likely weigh about 10 pounds?

   A. Magazine
   B. Shoe
   C. Bed
   D. Baby

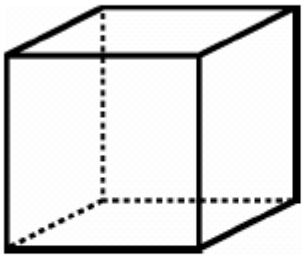
5. Michael Jordan is 6 feet, 6 inches tall.
   About how tall would a door in his house be?

   A. 6 yards
   B. 7 feet
   C. 12 inches
   D. 12 feet

6. Radios used to sell for $9.95. The same radios now sell for $12.50. How much more does a radio cost now?

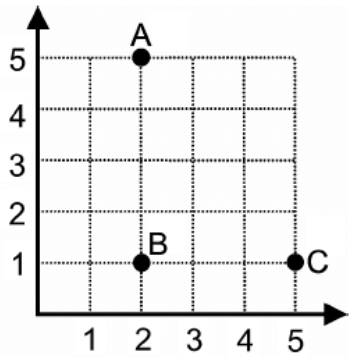
A. $0.95
B. $1.55
C. $2.55
D. $2.95

7. How many vertices does this shape have?



A. 2
B. 4
C. 6
D. 8

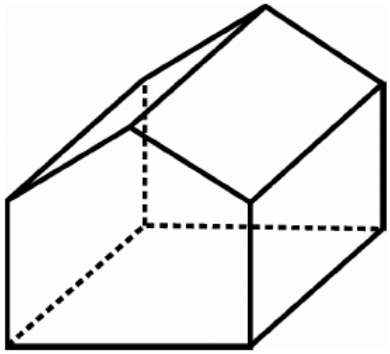
8. The distance traveled on the path from point A to point B to point C is _____.



A. 11
B. 7
C. 4
D. 3

9. Greg had $240 to spend on new clothes. He spent $43.85 on two shirts, $84.98 on a pair of shoes and $56.24 on a pair of pants.
About how much money did he spend?

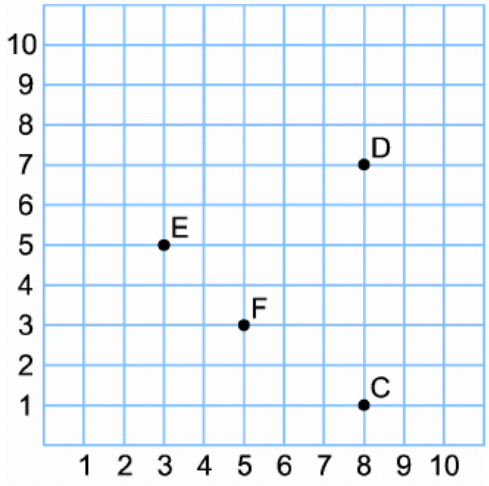
A. $200
B. $185
C. $175
D. $170



10. Students in Corey's class can sit in this tent to read.
How many vertices does the tent have?

A. 7
B. 9
C. 10
D. 15

11. On this graph, where is point E located?



A. (3, 5)
B. (5, 3)
C. (6, 3)
D. (8, 1)

12. Marissa collected 261 stickers in 3 years.
If she continues to collect the same number of stickers each year, how many stickers will she collect in year 4?

A. 83
B. 87
C. 265
D. 783

13. Three boys shared a candy bar. Rob ate $\frac{1}{4}$, Josh ate $\frac{1}{4}$, and Brent ate $\frac{1}{8}$.

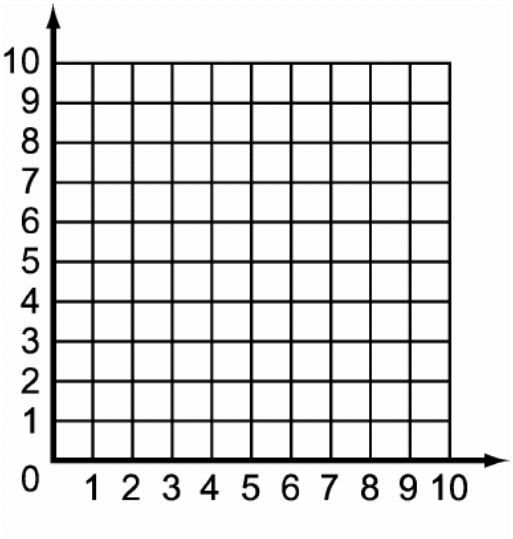
How much of the candy bar was left?

A. $\frac{5}{8}$
B. $\frac{3}{8}$
C. $\frac{2}{8}$
D. $\frac{1}{8}$

14. Susan has a box that is 10 inches long, 8 inches wide and 4 inches high.
What is the volume of her box?

A. 107 cubic inches
B. 120 cubic inches
C. 304 cubic inches
D. 320 cubic inches

15. What is the perimeter of a rectangle ABCD that has vertices at A (4, 1), B (9, 1), C (9, 9), and D (4, 9)?



A. 13 units
B. 18 units
C. 26 units
D. 40 units

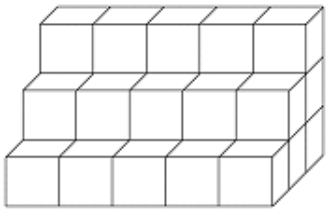
16. On a coordinate grid, which of the following describes a path to get from $(0,0)$ to $(6,3)$ to $(8,6)$?

A. right 3, up 6, right 3, up 2
B. right 6, up 3, right 2, up 3
C. right 6, up 8, right 2, up 3
D. right 8, up 6, right 3, up 2

17. If 3 cars hold 15 people, how many cars are needed for 165 people?

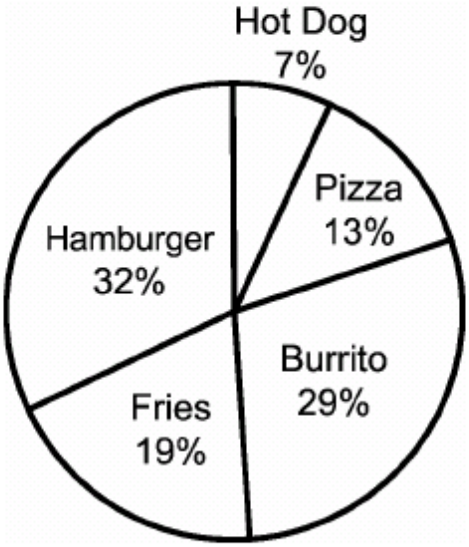
A. 11 cars
B. 33 cars
C. 55 cars
D. 180 cars

18. Thirty cubes were used to construct this 3-step staircase.
How many cubes would be used to construct a 10-step staircase of the same width?



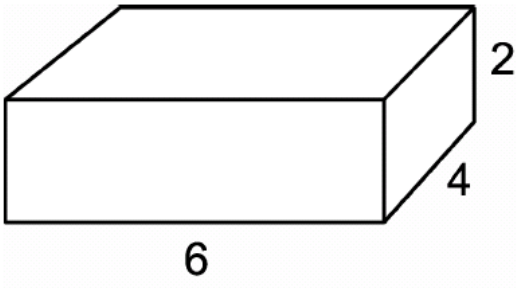
A. 100
B. 180
C. 240
D. 275

19. The student café sells pizza, hamburgers, hot dogs, burritos, and fries.
Which items DO NOT make up approximately one half of the sales?



A. Hamburger and fries
B. Hamburger, burrito, and pizza
C. Burrito and fries
D. Hot dog, burrito, and pizza

20. A rectangular prism has the given dimensions.
If those dimensions are doubled, how does the volume of the new prism compare to the volume of the original?



A. 2 times as much
B. 4 times as much
C. 6 times as much
D. 8 times as much

Oregon Mathematics Sample Test

Use number 2 pencil.
Do NOT use ink or ball point pen.
Make heavy dark marks that completely fill the circle.
Erase completely any marks you wish to change.

Name of Student _____

Name of Teacher _____

Name of School _____

1	Ⓐ	Ⓑ	Ⓒ	Ⓓ	11	Ⓐ	Ⓑ	Ⓒ	Ⓓ
2	Ⓐ	Ⓑ	Ⓒ	Ⓓ	12	Ⓐ	Ⓑ	Ⓒ	Ⓓ
3	Ⓐ	Ⓑ	Ⓒ	Ⓓ	13	Ⓐ	Ⓑ	Ⓒ	Ⓓ
4	Ⓐ	Ⓑ	Ⓒ	Ⓓ	14	Ⓐ	Ⓑ	Ⓒ	Ⓓ
5	Ⓐ	Ⓑ	Ⓒ	Ⓓ	15	Ⓐ	Ⓑ	Ⓒ	Ⓓ
6	Ⓐ	Ⓑ	Ⓒ	Ⓓ	16	Ⓐ	Ⓑ	Ⓒ	Ⓓ
7	Ⓐ	Ⓑ	Ⓒ	Ⓓ	17	Ⓐ	Ⓑ	Ⓒ	Ⓓ
8	Ⓐ	Ⓑ	Ⓒ	Ⓓ	18	Ⓐ	Ⓑ	Ⓒ	Ⓓ
9	Ⓐ	Ⓑ	Ⓒ	Ⓓ	19	Ⓐ	Ⓑ	Ⓒ	Ⓓ
10	Ⓐ	Ⓑ	Ⓒ	Ⓓ	20	Ⓐ	Ⓑ	Ⓒ	Ⓓ

We are not able to provide a Raw-to-RIT chart as we had in the past. Many of the items were initially calibrated under the old standards for different grades, and these items do not cover all of the new standards. Since the item calibrations (RIT) are not accurate for the new standards, any attempt to convert a raw score to a RIT score would not be valid.

Item Number	Answer Key	Score Reporting Category	2007 Grade 5 Content Standard
1	C	5.3 : Geometry, Measurement, and Algebra	5.3.3
2	B	5.1 : Number and Operations and Data Analysis	5.1.5
3	B	5.3 : Geometry, Measurement, and Algebra	5.3.3
4	D	5.3 : Geometry, Measurement, and Algebra	5.3.7
5	B	5.3 : Geometry, Measurement, and Algebra	5.3.7
6	C	5.1 : Number and Operations and Data Analysis	5.1.4
7	D	5.3 : Geometry, Measurement, and Algebra	5.3.3
8	B	5.1 : Number and Operations and Data Analysis	5.1.6
9	B	5.1 : Number and Operations and Data Analysis	5.1.3
10	C	5.3 : Geometry, Measurement, and Algebra	5.3.3
11	A	5.1 : Number and Operations and Data Analysis	5.1.6
12	B	5.2 : Number and Operations and Algebra	5.2.4
13	B	5.1 : Number and Operations and Data Analysis	5.1.1
14	D	5.3 : Geometry, Measurement, and Algebra	5.3.8
15	C	5.1 : Number and Operations and Data Analysis	5.1.6
16	B	5.1 : Number and Operations and Data Analysis	5.1.6
17	B	5.2 : Number and Operations and Algebra	5.2.4
18	D	5.3 : Geometry, Measurement, and Algebra	5.3.8
19	B	5.1 : Number and Operations and Data Analysis	5.1.7
20	D	5.3 : Geometry, Measurement, and Algebra	5.3.9

GRADE FIVE END OF YEAR SAMPLE TEST

TABLE OF SPECIFICATION: SECTION A

SECTION A – MULTIPLE CHOICE

Section A comprises 44 multiple-choice items covering the five strands of the curriculum. All items are weighted equally and together are worth 44 marks.

STRANDS	Simple Recall/ Knowledge	Use of Knowledge	Mathematical Reasoning	Total # of Items
Number	2 (9,10)	14 (1, 2, 3, 4, 5, 6, 7, 8,11,12,13,15,16,17)	3 (14, 18, 19)	19
Measurement	5 (20, 21, 23, 24, 29)	4 (25, 26, 27, 28)	1 (22)	10
Geometry	1 (32)	1 (30)	1 (31)	3
Algebra	1 (33)	1 (35)	1 (34)	3
Statistics	2 (40, 41)	7 (36, 37, 38, 39, 42, 43, 44)	-	9
Total # of Items	11	27	6	44

TABLE OF SPECIFICATION: SECTION B

SECTION B

Section B comprises 5 structured questions covering four of the five strands of the curriculum. Students are required to answer all questions. Questions are weighted differently giving a total of 16 marks.

STRANDS	Simple Recall/ Knowledge	Use of Knowledge	Mathematical Reasoning	Total # of Marks
Number	-	3 (1a, 1b, 1c)	3 (2a)	6
Measurement	-	2 (3a, 3b)	2 (3c)	4
Geometry	1 (5a)		2 (5b)	3
Algebra	-	1 (4a)	2 (4b)	3
Statistics	-	-	-	-
Total # of marks	1	6	9	16

SAMPLE END OF YEAR TEST – SECTION A

Grade Five Mathematics Sample End of Year Test

Name: _____ Date: _____

SECTION A

CIRCLE THE CORRECT ANSWER FOR EACH OF THE FOLLOWING.

1. Which best represents four thousand, three hundred and three?

   a) 453
   b) 4033
   c) 4303
   d) 40003003

2. What is the value of 21.34 + 378.15 + 3.01?

   a) 302.50
   b) 392.50
   c) 402.50
   d) 492.50

3. Which best describes the set {2, 3, 5, 7, 11 ….}?

   a) odd numbers
   b) even numbers
   c) fractional numbers
   d) prime numbers

4. What is the value of 486 x 37?

   a) 18042
   b) 17982
   c) 17980
   d) 17882

5. Round off to the nearest hundredth: 29.909.

   a) 29.908
   b) 29.910
   c) 29.918
   d) 30.908

6. What is the value of 4007 – 3984?

   a) 13
   b) 23
   c) 123
   d) 133

7. Which of the following represents 5^3?

   a) $5 \times 5 \times 5$
   b) $5 + 5 + 5$
   c) 5×3
   d) $3 \times 3 \times 3 \times 3 \times 3$

8. Express $\frac{4}{5}$ as a decimal number.

   a) 0.4
   b) 0.45
   c) 0.6
   d) 0.8

9. What is the least common multiple for 12 and 8?

   a) 4
   b) 12
   c) 24
   d) 48

10. Study shows that there are over 2 034 651 stars in the galaxy. What is the value of the 3 in this number?

    a) three thousand
    b) thirty thousand
    c) thirty four thousand
    d) three hundred thousand

11. What is the value of $3\frac{3}{4} - 2\frac{1}{4}$?

a) $1\frac{1}{2}$

b) $1\frac{3}{4}$

c) $2\frac{1}{4}$

d) $2\frac{3}{4}$

12. What is the value of $2\frac{1}{3} + 4\frac{1}{2}$?

a) $6\frac{1}{6}$

b) $6\frac{1}{5}$

c) $6\frac{2}{5}$

d) $6\frac{5}{6}$

13. What is the value of $\frac{1}{3} \times \frac{1}{2}$?

a) 6

b) $\frac{1}{6}$

c) $\frac{5}{30}$

d) $\frac{1}{5}$

14. Mr. Phillips needs $2\frac{1}{3}$ m of fabric to make a shirt.

How many similar shirts can be made from 35m of material?

a) 37 shirts

b) 15 shirts

c) 18 shirts

d) 32 shirts

15. Express 3.25 as a fraction in its lowest term?

a) $3\frac{1}{4}$

b) $3\frac{3}{4}$

c) $3\frac{1}{2}$

d) $3\frac{2}{5}$

16. What is the product of 123 and 2.8?

a) 3.444

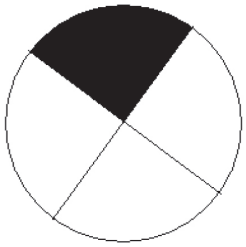
b) 34.44

c) 344.4

d) 3444

Use the diagram to answer question 17

17. If the shaded portion of the circle represents 17 students.
How many students are there in all?



a) 17

b) 34

c) 51

d) 68

18. Three students collected 2 153 counters. One collected 635 and another collected 819.
How many counters did the third student collect?

a) 699

b) 729

c) 1434

d) 1719

19. Claudia wants to pack 206 oranges into some boxes.
What is the minimum number of boxes that she needs if each box can hold 12 oranges?

a) 19
b) 18
c) 17
d) 16

20. Which unit would you use to measure the following items: water, milk and soda?

a) metre
b) kilogram
c) grams
d) litre

21. Which of the following shows another way of writing 6 kilolitres?

a) 60 L
b) 600 L
c) 6000 L
d) 60000L

22. A tree was 5.4 m tall 5 years ago. It grows an average height of 25 cm every year.
How tall is the tree now?

a) 5.65 m
b) 6.29 m
c) 6.65 m
d) 7.9 m

23. Which of the following is associated with the prefix centi?

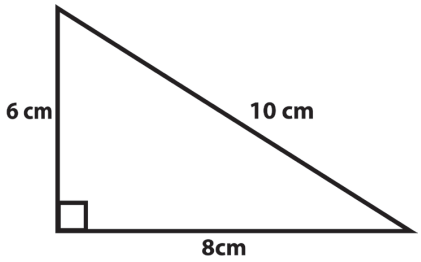
a) 100
b) 0.01
c) 0.001
d) 0.1

24. Marian bought 1 kg and 800 g of flour on Monday, while on Tuesday she bought 3 kg and 300g. What was the total amount of flour she bought?

a) 3kg 500g
b) 4kg 100g
c) 4 kg 500g
d) 5kg 100g

25. How would you find the area of the triangle below?

a) 6×8 m^2
b) $\frac{6 \times 8}{2}$ m^2
c) $6 \times 8 \times 2$ m^2
d) $6 \times 8 \times 10$ m^2



26. How many millimetres are equivalent to 30 centimetres?

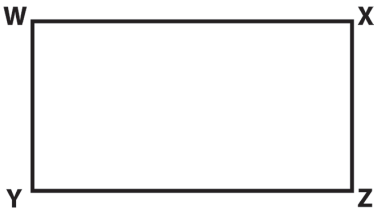
a) 3 mm
b) 30 mm
c) 300 mm
d) 3000 mm

27. The temperature in Canada was 10°C below zero. The next morning it was 17°C below zero. What is the difference in the temperature?

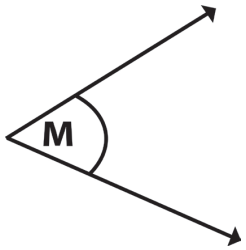
a) 7° C
b) 3° C
c) –7° C
d) –3° C

28. In the diagram below, side WX measures 14 cm. Side XZ is half the length of side WX. What is the perimeter of the shape?

a) 14 cm
b) 28 cm
c) 42 cm
d) 56 cm



29. What is the best estimate of the Angle M?



a) less than 90^0

b) equal to 90^0

c) greater than 90^0 but less than 180^0

d) greater than 180^0 but less than 360^0

30. Which of the following sets of interior angle measurements would most likely be that of an isosceles triangle?

a) 90 °, 45 °, 45 °

b) 60 °, 60 °, 60 °

c) 100 °, 30 °, 50 °

d) 120 , 20 °, 40 °

31. Which statement about the trapezoid is true?

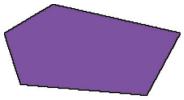
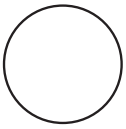
a) the trapezoid has 3 acute angles

b) the trapezoid has 4 sides that are parallel

c) the trapezoid has 2 right angles

d) the trapezoid has 2 obtuse angles

32. Which of these shapes is NOT an example of a polygon?

a)  b)  c)  d) 

33. Which expression represents the product of n and 25?

a) 25n

b) 25– n

c) 25 + n

d) 25 ÷ n

34. Which situation best describes the expression 4 + x?

a) 4 children and x adults in a room

b) A total number of books on a shelf and x are missing

c) A total of 4 cars in a parking lot

d) A total of 4 lost socks

35. What is the value of ***p***, if $3p + 6 = 12$?

a) 9

b) 6

c) 3

d) 2

Bobby obtained the scores below on his tests. Use these scores to answer questions 36 and 37.

96, 87, 75, 82, 87

36. What is the range of Bobby's score?

a) 9

b) 21

c) 87

d) 96

37. What is the median of the set of scores?

a) 96

b) 87

c) 85

d) 75

Use the following information to answer questions 38 and 39. A bag contains the following items: 3 red pens, 2 blue pens, 4 white pens and 3 black pens.

38. If you were to choose one pen at random, which pen are you most likely to choose?

a) a red pen

b) a blue pen

c) a white pen

d) a black pen

39. What is the probability of choosing a white pen?

a) $\frac{1}{4}$

b) $\frac{1}{6}$

c) $\frac{1}{3}$

d) $\frac{1}{2}$

Use the table below to answer questions 40 and 41

No of books borrowed	**0**	**1**	**2**	**3**	**4**	**5**	**6**
No. of students	**3**	**7**	**9**	**5**	**10**	**6**	**3**

A librarian recorded the number of books borrowed by pupils of Primary 5B in the table above.

40. How many pupils borrowed 3 or more books?

a) 5

b) 15

c) 19

d) 24

41. What was the total number of books borrowed by the pupils of Primary 5B?

a) 128

b) 43

c) 21

d) 6

The pictograph shows students attendance at school for 5 days.
Use the diagram below to answer questions 42 and 43.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	
Key	 =15 students

42. On which day did 75 students attend school?

    a) Monday

    b) Tuesday

    c) Wednesday

    d) Thursday

43. What is the mean attendance for Monday and Tuesday?

    a) 40

    b) 50

    c) 60

    d) 70

Use the Table to answer question 44
The table shows the scores of students on a Mathematics Test

Students	Scores
Paul	89
Jim	34
Pam	72
Jill	34
Bob	20

44. Which statement is true about the data?

    a) 3 students got the same score on the test

    b) 2 students scored more than 72 on the test

    c) 3 students scored more than 50 on the test

    d) 3 students scored less than 50 on the test

SAMPLE END OF YEAR TEST – SECTION B

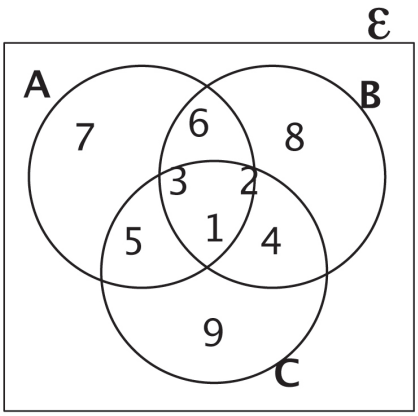
Grade Five Mathematics Sample End of Year Test

Name: _____ Date: _____

SECTION B

ANSWER ALL QUESTIONS IN THIS SECTION

1. Observe the following Venn diagram and then use it to answer the questions below.



a) What are the members of Set A?

_____

b) What are the members of the Universal Set?

_____

c) What are the members of A ∩ B?

_____

2. Read the price list and answer the questions below.

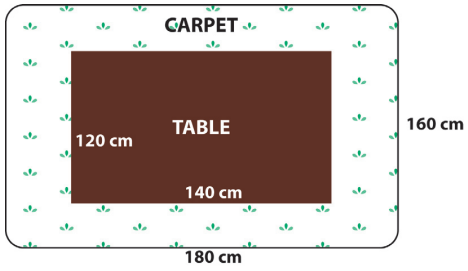
Price List

Bread	$85.40
Butter	$67.20
Syrup	$55.80
Cheese	$25.30

Paul bought 2 breads, 1 pack of butter, 2 bottles of syrup and 3 slices of cheese and got $74.50 change. How much money did he have in the beginning? (Show working) (3 marks)

_____

3. Mother bought a carpet and placed it in her living room. She then placed a table in the middle of the carpet?



a) What is the area of the table? _____ (1 mark)

b) What is the area of carpet? _____ (1 mark)

c) What is the area of the uncovered section of the carpet? _____ (2 marks)

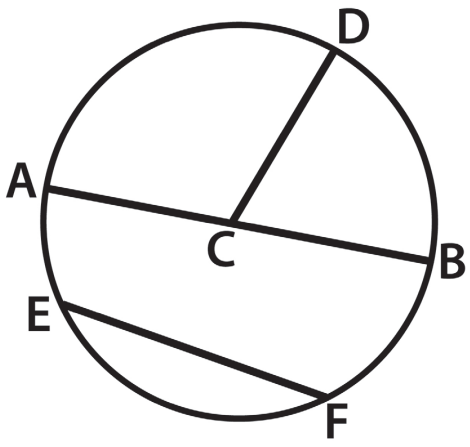
4. a) If **x** = 2, **y** = 3 and **z** = 4, find the value of $\frac{y}{z} - \frac{x}{z}$ (2 marks)

_____

b) David's father is 49. He is 15 years older than twice David's age. How old is David? (2 marks)

_____

5. Use the circle below to answer the following questions:



a) Name the part of the circle labeled EF_____ (1 mark)

b) Identify AB and CD then explain the relationship between both parts.

_____ (2 marks)

SAMPLE END OF YEAR TEST – ANSWER SHEET

Answer Sheet
Grade Five Sample Test

1.	C	23.	B
2.	C	24.	D
3.	D	25.	B
4.	B	26.	C
5.	B	27.	C
6.	B	28.	C
7.	A	29.	A
8.	D	30.	A
9.	C	31.	D
10.	B	32.	C
11.	A	33.	A
12.	D	34.	A
13.	B	35.	D
14.	B	36.	B
15.	A	37.	B
16.	C	38.	C
17.	D	39.	C
18.	A	40.	D
19.	B	41.	B
20.	D	42.	A
21.	C	43.	C
22.	C	44.	D