1. Write your composition on one of the subjects listed below.

2. Write neatly and erase clearly.

3. Use punctuation marks and capital letters where they belong.

4. Make sure your composition is orderly and well arranged.

5. You may ask an adult to help you spell words, but underline all such words.

6. Organize your thoughts prior to writing the composition by writing an outline or a rough draft. The final copy submitted should be your very best work. When you submit your composition with your test, you may include your outline or rough draft, if you choose.

NOTE: A child entering our Fourth Grade should be able to write about a 100-word composition, while a child entering our Eighth Grade should be able to write about a 200-word composition. This is a general guideline, however, and is not intended to restrict or force the child to write an exact number of words.

My Pets	**My Mother**	**My Father**
My Best Friend	**An Interesting Trip**	**Fun on Saturday**
My Dog	**An Exciting Day**	

THE TIME REQUIRED TO WRITE THIS COMPOSITION WAS _____ MINUTES.

Does the time you recorded above include any or all steps of preplanning (use of an organizer, writing a rough draft, editing, and writing final draft), or does it include only the writing of the composition? _____

_____

_____

_____

Part II. Reading Comprehension

Read each passage, then answer the questions. Fill in the circle to indicate your answer.

SECTION A

The little red-roofed farmhouse was very old, its chimney crooked and even the small, shuttered windows tilted at angles. A bird's nest, wispy with straw, was half hidden in the corner where the roof met the wall above a bedroom window. Nearby, a gnarled tree was still speckled with a few apples now long past ripe.

Mama and Kirsti had gone inside, but Annemarie and Ellen ran across the high-grassed meadow, through the late wildflowers. From nowhere, a gray kitten appeared and ran beside them, pouncing here and there upon imagined mice, pausing to lick its paws, and then darting off again. It pretended to ignore the girls, but looked back often to be certain that they were still there, apparently pleased to have playmates.

The meadow ended at the sea, and the gray water licked there at damp brown grass flattened by the wind and bordered by smooth heavy stones.

"I have never been this close to the sea," Ellen said.

"Of course you have. You've been to the harbor in Copenhagen a million times."

Ellen laughed. "I mean the real sea, the way it is here. Open like this – a whole world of water."

© *Number The Stars*, by Lois Lowry

1. The words "licked there at damp brown grass" mean _____ .

    ○ the sea was slowly flooding the area

    ○ the grass was dead and needed water

    ○ the sea water gently reached the meadow

    ○ the grass was dead because it had too much water

2. How is the word *speckled* used in the passage to describe the apple tree?

    ○ A large number of apples were hanging on the tree.

    ○ A small number of apples were spread over the tree.

    ○ The apples in the tree had a disease.

    ○ The apples in the tree were rotten.

3. Based on references in the story, what season is it?

    ○ winter

    ○ spring

    ○ summer

    ○ fall

4. According to the story, who saw the kitten?

   ○ Mamma and Kirsti

   ○ Ellen, Kirsti, Mamma, and Annemarie

   ○ Annemarie and Kirsti

   ○ Ellen and Annemarie

5. Why does Ellen laugh?

   ○ She is happy being so close to the sea.

   ○ She is confused about the difference between a harbor and the sea.

   ○ She sees humor in the fact that a harbor was compared to the sea.

   ○ She is embarrassed because she has not before seen the sea.

In 1598, Don Juan de Oñate (oh NYAH teh), a wealthy Spaniard, went out to settle new lands. He marched north from Central Mexico with a band of colonists, armed troops, and friars. The friars were members of a religious order who wanted to convert Native Americans to Christianity.

Over 16,000 Pueblo Indians lived in the area de Oñate claimed. The Pueblo were agricultural people with strong religious beliefs. The Spanish, however, believed the greatest kindness they could do for the Pueblo was to convert them to Christianity. To do this, the friars built missions, or church settlements, all over New Mexico. To protect the friars and their converts from the Apache and the Navajo, the Spanish built presidios, or forts. By 1680 a thin chain of missions and presidios stretched across the Southwest.

Many Pueblo continued to practice their religion in secret. When they were discovered, Spanish officials punished them. One of those punished was a spiritual leader named Popé (poh PEH). He believed the Spanish attempt to convert the Pueblo was harmful. Popé planned a revolt against the Spanish and got others to join him.

On August 10, 1680, Popé's followers rose up, burning churches and attacking haciendas. The Spanish fled south to El Paso. The Pueblo had driven the Spanish out of their land at least for a short time.

1. Why did de Oñate travel north from Central Mexico?

   ○ He was visiting Popé.

   ○ He wanted to settle new lands.

   ○ He was planning a revolt against the Spanish.

   ○ He wanted to stop the practice of Christianity.

2. Why did the Spanish want to convert the Pueblo to Christianity?

   ○ They thought that the Pueblo religion was incorrect.

   ○ They thought that the Pueblo wanted to be converted.

   ○ The Spanish thought they were being kind.

   ○ They wanted to build presidios.

3. Why do you think the Pueblo practiced their religion in secret?

   ○ They feared what would happen if the Spanish found out.

   ○ Their religion required them to practice in secret.

   ○ They thought that practicing their religion in secret would protect the Spanish from Popé.

   ○ The Spanish wanted them to practice their religion in secret.

4. What is the best title for this passage?

   ○ Native Americans Settle New Lands

   ○ The Spanish Try to Convert the Pueblo

   ○ Popé Attacks the Pueblo

   ○ The Friars Revolt Against the Spanish

5. What is the best definition of *mission* as it is used in this passage?

   ○ the business with which a group is charged

   ○ an operational task, usually assigned by a higher headquarters

   ○ missionary duty or work

   ○ a church settlement

SECTION B

Minnie May, aged three, was really very sick. She lay on the kitchen sofa, feverish and restless, while her hoarse breathing could be heard all over the house. Young Mary Joe, whom Mrs. Barry had engaged to stay with the children during her absence, was helpless and bewildered, quite incapable of thinking what to do, or doing it if she thought of it.

Anne went to work with skill and promptness.

"Minnie May has croup all right; she's pretty bad, but I've seen them worse. First we must have lots of hot water. I declare, Diana, there isn't more than a cupful in the kettle! There, I've filled it up, and, Mary Joe, you may put some wood in the stove. I don't want to hurt your feelings, but it seems to me you might have thought of this before if you'd any imagination. Now, I'll undress Minnie May and put her to bed, and you try to find some soft flannel cloths, Diana. I'm going to give her a dose of ipecac first of all."

Minnie May did not take kindly to the ipecac, but Anne had not brought up three pairs of twins for nothing. Down that ipecac went, not only once, but many times during the long, anxious night when the two little girls worked patiently over the suffering Minnie May, and Young Mary Joe, honestly anxious to do all she could, kept on a roaring fire and heated more water than would have been needed for a hospital of croupy babies.

It was three o'clock when Matthew came with the doctor, for he had been obliged to go all the way to Spencervale for one. But the pressing need for assistance was past. Minnie May was much better and was sleeping soundly.

© Anne of Green Gables, L.M. Montgomery

1. Based upon what is stated in the passage, which words might best describe Anne?

   ○ knowledgeable and attentive

   ○ slothful and uninspiring

   ○ erratic and fickle

   ○ helpless and bewildered

2. Based on the passage, ipecac is probably a type of _____.

   ○ food

   ○ clothing

   ○ medicine

   ○ water

3. How did Anne know what to do to treat Minnie May's croup?

   ○ Anne read a book describing how to cure illnesses in children.

   ○ Matthew and the doctor gave her detailed instructions.

   ○ Anne had croup as a child and remembered how she had been cured.

   ○ Anne helped raise three sets of twins, giving her experience in treating croup.

4. Which of the following is not an example of how other characters in the story assisted Anne in saving Minnie May's life?

   ○ Matthew went to Spencervale to fetch the doctor.

   ○ Mrs. Barry cooked a pot of chicken soup.

   ○ Mary Joe tended to the fire and kept a supply of hot water on hand.

   ○ Diana helped locate soft, flannel cloths.

5. By the time the doctor arrived from Spencervale, Anne and the other girls probably felt _____.

   ○ relief

   ○ disgust

   ○ frustrated

   ○ amused

Changing density can explain why an object floats or sinks. For example, you can change the density of water by freezing it into ice. Since water expands when it freezes, ice occupies more space than water. That's why ice is less dense than water. But it's just a little less dense! So most of an ice cube floating on the surface is below the water's surface.

You can make an object sink or float in a fluid by changing its density. The density of a submarine is increased when water fills its floatation tanks. The overall mass of the submarine increases. Since its volume remains the same, its density increases when its mass increases. So the submarine will dive. To make the submarine float to the surface, water is pumped out of it, decreasing its mass. Its density decreases, and it rises toward the surface.

You can also explain why a submarine dives and floats by means of the buoyant force. Since the buoyant force is equal to the weight of the displaced fluid, the buoyant force on the submerged submarine stays the same. Changing the water level in the flotation tanks changes the weight of the submarine. The submarine dives when its weight is greater than the buoyant force. It rises to the surface when its weight is less than the buoyant force.

© Prentice Hall

1. Which statement is incorrect?

   ○ The density of an object increases as the mass of that object increases.

   ○ The density of an object cannot be changed.

   ○ An object will sink when its weight is greater than that of the buoyant force.

   ○ An object that is less dense than water will float.

2. Increasing the water level in the floatation tanks of a submarine causes the submarine to dive because the weight of the vessel is greater than that of the buoyant force. If the weight of a submerged object, such as a submarine, is equal to the buoyant force, the object will _____ .

   ○ rise above the surface of the water

   ○ decrease in density

   ○ increase in mass

   ○ remain submerged in the water

3. According to the text, why does only a small fraction of an iceberg appear above the surface of water?

   ○ Ice is only slightly less dense than water.

   ○ The iceberg would melt if a larger portion of it was exposed to air.

   ○ The top of the iceberg weighs less than the bottom portion.

   ○ Water is slightly less dense than ice.

4. Which of the following is an example of when a person might have experienced the effects of buoyant force?

   ○ flying in an airplane

   ○ swimming under water

   ○ freezing water to create ice cubes

   ○ boiling an egg

5. Fran's recipe for salad dressing calls for mixing oil and vinegar. She places both ingredients in the bowl and notices that the oil floats on top of the vinegar. What conclusion can Fran draw about oil and vinegar?

   ○ Vinegar is less dense than oil.

   ○ Vinegar has a greater density than air.

   ○ Oil is less dense than vinegar.

   ○ Oil has a greater density than vinegar.

SECTION C

During the American Revolutionary War, under relentless British pursuit, the Continental (American) army kept retreating. British general John Burgoyne came up with a plan he hoped would quickly end the rebellion. However, at the village of Saratoga, New York, the Americans surrounded the British. After suffering heavy casualties, Burgoyne surrendered on October 17, 1777.

The Battle of Saratoga marked a major turning point in the war. The American victory ended the British threat to New England and destroyed British hopes of an easy victory. It also lifted Patriot spirits at a time when General Washington's army was suffering defeats. Perhaps most important, the Battle of Saratoga helped convince Europeans that the Americans had a sound chance of winning.

Soon after Saratoga, France agreed to openly support American independence. In February 1778, France officially formed an alliance with the United States. France was eager to weaken Britain. Even before Saratoga, the French had secretly supplied money and arms to the Americans. But the French did not want to take an open stand until it seemed the Americans might win. In February 1778, France became the first nation to sign a treaty with the United States.

France and its allies in the Netherlands and Spain also went to war with Britain. By carrying the fight to Europe and the Caribbean, the allies forced Britain to wage war on many fronts. This helped the American cause, because the British could spare fewer troops to fight in North America.

© Prentice Hall

1. What were three important results of the American victory at Saratoga?

   ○ raised the Patriot spirits; convinced Europeans that Americans could win the war; and opened up trading routes to the Caribbean

   ○ opened up trading routes to the Caribbean; France formed an alliance with the United States; ended British threat to New England

   ○ lifted Patriot spirits; ended British threat to New England; and convinced Europeans that Americans could win the war

   ○ France signed a treaty with America; ended British threat to New England; increased the money available to fight the war

2. How did France aid the Patriot cause?

   ○ France loaned the Americans money to buy arms, food, and uniforms for the soldiers.

   ○ France provided money and arms to the Patriots, and fought Britain in Europe.

   ○ French soldiers fought the British along side the Patriot troops in America.

   ○ France did not want to help the Americans because they were not sure that the Americans could win the war.

3. The word *relentless* in the sentence "During the American Revolutionary War, under relentless British pursuit..." means _____ .

    ○ unending and intense

    ○ constantly moving

    ○ extremely well planned

    ○ without focus

4. Pick the best title for this passage.

    ○ The Patriot Cause

    ○ Saratoga: A Turning Point

    ○ British Alliance with France

    ○ A Treaty with France

5. What could have happened if the Americans had lost the Battle of Saratoga?

    ○ America might have become part of France.

    ○ The British might have won the American Revolutionary War.

    ○ The British might have left New England.

    ○ The Americans might have convinced the Europeans to support them.

The Daffodils
By William Wordsworth

I wandered lonely as a cloud   (1)
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine   (7)
And twinkle on the Milky Way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

The waves beside them danced; but they   (13)
Out-did the sparkling waves in glee:
A poet could not but be gay,
In such a jocund company:
I gazed-and gazed-but little thought
What wealth the show to me had brought:

For oft, when on my couch I lie   (19)
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

1. What is the meaning of the word *pensive* in line 20?

   ○ deeply thoughtful

   ○ confused

   ○ extremely joyful

   ○ sad

2. Line 1 is an example of _____ .

   ○ a metaphor

   ○ rhyme scheme

   ○ a simile

   ○ alliteration

3. What is the meaning of *inward eye* in line 21?

   ○ a camera lens

   ○ personal memory

   ○ the lens of the eye

   ○ feelings

4. Which line is an example of personification?

   ○ Ten thousand saw I at a glance

   ○ Tossing their heads in sprightly dance

   ○ What wealth the show to me had brought

   ○ And then my heart with pleasure fills

5. Which statement best describes the message of the poem?

   ○ Daffodils are beautiful and admired by many people.

   ○ Flowers dance in the spring breezes.

   ○ It can be lonely among a field of flowers.

   ○ Upon reflection, the beauty of the daffodils brings happiness.

I. Carefully read each of the following groups of words. Put a check mark (✓) on the line only if the group of words is a complete sentence. Watch out! Punctuation marks do not necessarily mean complete sentences.

_____ 1. The children on the baseball team.

_____ 2. The playful kittens are fun to watch.

_____ 3. The boys climbed up to the tree house quickly.

_____ 4. Each of the children.

_____ 5. Teddy is a good swimmer.

II. Draw a line (/) between the complete subject and the complete predicate in the following sentences.

Example: The three little kittens / lost their mittens.

1. Most boys enjoy sports.
2. Many pretty flowers were blooming in Mary's garden.
3. The grandfather clock struck twelve.
4. The eraser on that pencil makes black streaks.
5. The parade will pass down our street.
6. The packages arrived in the morning mail.

III. Underline each verb phrase.

Example: My aunt from Kansas <u>has arrived</u> for a visit.

1. The wind is blowing from the South.
2. Motorcycles were roaring down the highway.
3. The children had been playing all morning.
4. The busy bees have been gathering nectar.
5. Their parents will be coming to the game.

IV. Underline all adjectives in these sentences. Do not underline the articles *a, an,* or *the.* The number in parentheses at the end of each sentence tells the total number of adjectives you should have marked.

Example: <u>Many</u> children sing in the <u>community</u> chorus. (2)

1. We saw a beautiful, bright light. (2)

2. The tall, blond girl brought an empty basket. (3)

3. The spotted dog ran to greet the littleboy. (2)

4. The black cat has white whiskers. (2)

5. Six friends ate hamburgers at the summer picnic. (2)

V. Underline all of the adverbs in these sentences. The number in parentheses will tell you the number of adverbs in the sentence.

Example: The mayor <u>recently</u> came to the town meeting. (1)

1. That story really seems quite fantastic. (2)

2. The usually noisy playroom was unusually quiet. (2)

3. That speech was unnecessarily long. (1)

4. He almost always comes here with them. (3)

5. The children are playing there quietly now. (3)

Part IV. Punctuation & Capitalization

The sentences below are missing necessary periods, commas, apostrophes, question marks, exclamation marks, and quotation marks. Put the punctuation marks where they belong. Also add capital letters wherever needed by printing the capital on top of the small letter. (Do not rewrite the sentences.)

1. its hard to guess how the puppy hurt its paw

2. mrs smiths house isnt very big

3. i will help you he said

4. this dogs tail is short but those dogs tails are shorter

5. may we come with you they asked

6. toms address is 105 tuscany road baltimore maryland

7. william shakespeare the great english poet was probably born on april 23 1564 in stratford england

8. he wrote the plays hamlet a midsummer nights dream macbeth and many others

9. ive lost my pencil cried jane now what shall i do

This placement test will evaluate your student on the skills necessary to successfully begin the Seventh or Eighth Grade Math curriculum. Remember, your student should complete the work independently. Avoid teaching the skills to your student while administering the test as this assessment is meant to provide an accurate evaluation of your child's current skills. The student does not need to complete the whole test. The student may skip any problems that are too difficult to complete.

If you have any questions, you may contact a Calvert Education Counselor at edcounselors@calvertservices.org or call 888-487-4652, option 2.

Please show all your work when possible.

PART A

1. Solve.

   $3,542 + 7,256 + 4,984 =$ _____

   $\$1,420 - \$720 =$ _____

804 × 219	3674 × 89	4321 × 96

5)6782	96)3224	8)3224

2. Solve and put the answer in simplest form.

$$\begin{array}{r} \frac{1}{8} \\ +\frac{6}{8} \\ \hline \end{array}$$

$$\begin{array}{r} 17\frac{11}{13} \\ -9\frac{7}{13} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{2}{8} \\ +\frac{4}{8} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{8}{4} \\ +\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} \frac{9}{10} \\ +\frac{3}{10} \\ \hline \end{array}$$

$$2-\frac{3}{5}=$$

$$\frac{3}{4}\times4=$$

$$\frac{1}{4}\times6=$$

3. Choose the correct set of data that shows the mean, median, mode and range of the following set of numbers.
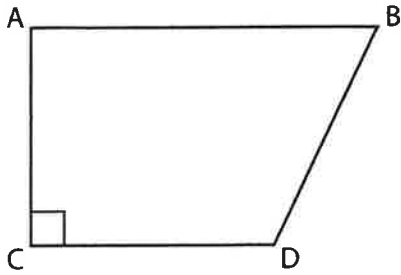
12 , 8, 7, 10, 8, 7, 8, 12

○ Mean – 72; Median – 16; Mode – 7; Range – 12
○ Mean – 72; Median – 9; Mode – 7; Range – 7
○ Mean – 9; Median – 8; Mode – 8; Range – 5
○ Mean – 5; Median – 8, Mode – 9; Range – 8

4. Solve.

In a class of 30 students, 3/5 are girls. How many are girls? _____

Use the figure below to answer the following two questions.
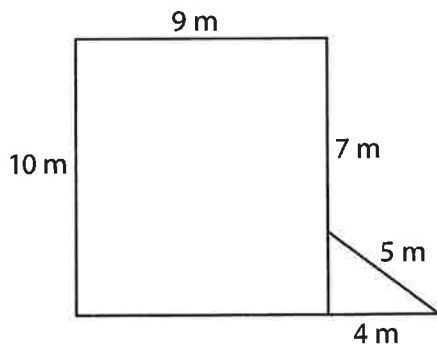

5. Name a pair of parallel line segments.

   ○ $\overline{AB}$ and $\overline{BD}$
   ○ $\overline{AC}$ and $\overline{BD}$
   ○ $\overline{AB}$ and $\overline{CD}$
   ○ $\overline{CD}$ and $\overline{BD}$

6. Name a vertical line segment.

   ○ $\overline{AB}$
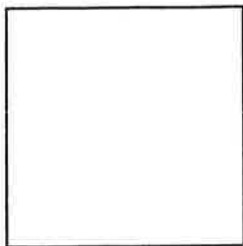   ○ $\overline{AC}$
   ○ $\overline{AD}$
   ○ $\overline{DB}$

Use the figure below to answer the following questions.
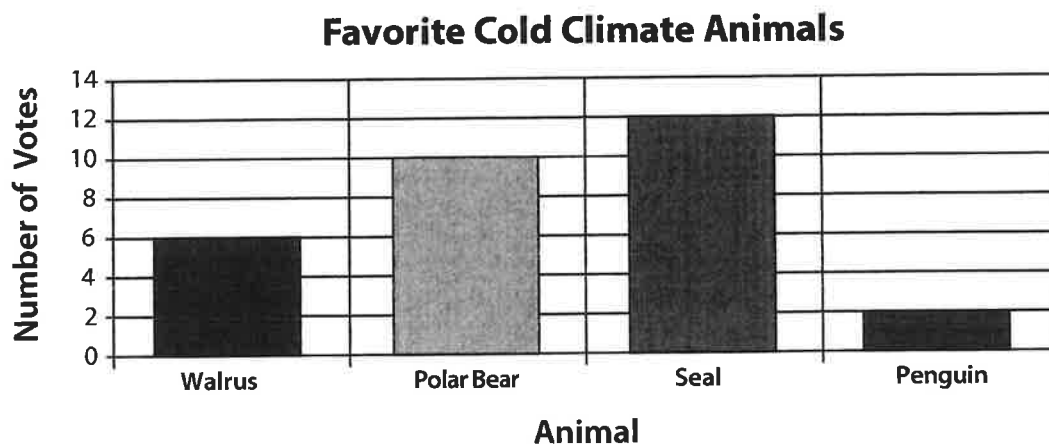

7. Find the perimeter of the figure. _____

8. What is the area of the triangle? _____

0417

9. Choose the correct number of lines of symmetry for this square.

○ 2
○ 4
○ 6
○ 8

Use the graph showing favorite cold climate animals to answer the following questions.

Favorite Cold Climate Animals

10. How many total votes are shown? _____

11. What is the difference between the animal that received the most votes and the animal that received the least votes? _____.

12. A pair of pants costs $36.49. A shirt costs $24.95. Victor has $55.00. How much more money does he need to buy the pair of pants and the shirt? _____.

13. Sam jogged on Monday and Tuesday. He jogged 4.55 kilometers on Monday and 1.78 kilometers farther on Tuesday than on Monday. What was the distance he jogged on both days? _____.

0417

PART B

Please show your work.

1. Solve these problems.

$$
\begin{array}{r}
456 \\
\times 831 \\
\hline
\end{array}
\qquad\qquad
\begin{array}{r}
6280 \\
\times 283 \\
\hline
\end{array}
\qquad\qquad
8959 \div 289 = \underline{\hspace{2cm}}
$$

$$21\overline{)52{,}576}$$

2. Choose the number statements below that are correct. There may be more than one correct answer.

○ $\dfrac{2}{4} = \dfrac{15}{30}$

○ $\dfrac{9}{27} > \dfrac{5}{6}$

○ $\dfrac{4}{3} > 1\dfrac{1}{4}$

○ $\dfrac{4}{12} < \dfrac{2}{24}$

3. Solve each problem and write the correct answer in simplest form.

$\dfrac{2}{3}$

$\dfrac{3}{4}$

$+\dfrac{5}{6}$
_____

$11\dfrac{2}{3}$

$-\dfrac{8}{9}$
_____

$6\dfrac{2}{3}$

$+1\dfrac{1}{6}$
_____

$4\dfrac{4}{5} - 3\dfrac{2}{5} =$ _____

$\dfrac{5}{8} + \dfrac{2}{3} =$ _____

4. Write an equation for each of these word problems below and solve.

Jason sold 6 boxes of greeting cards with 18 cards in each box, and 12 boxes with 24 cards in each box. How many greeting cards did he sell?

Equation: _____

Answer: _____

Ralph spent $\dfrac{5}{9}$ of an hour mixing paints and $\dfrac{7}{9}$ of an hour painting. How much time in all did Ralph spend on his project?

Equation: _____

Answer: _____

5. Solve these problems.

$$5\frac{1}{2} \cdot (7\frac{1}{2} - 3\frac{1}{2}) = \underline{\hspace{2cm}}$$

$$125 \div 5 - 2 \times 8 = \underline{\hspace{2cm}}$$

$$19 - 5 + 2 \cdot 3 = \underline{\hspace{2cm}}$$

6. Solve each problem and write the correct answer in simplest form.

$$\frac{2}{3} \times \frac{5}{6} = \underline{\hspace{1.5cm}} \qquad\qquad \frac{5}{7} \times \frac{4}{6} = \underline{\hspace{1.5cm}}$$

$$\frac{2}{4} \times 12 = \underline{\hspace{1.5cm}} \qquad\qquad 2\frac{1}{3} \times 2 = \underline{\hspace{1.5cm}}$$

$$5 \times 4\frac{2}{3} = \underline{\hspace{1.5cm}}$$

7. Choose the answer that shows the decimals in order from least to greatest.

○ 0.06   0.6   0.602   0.66

○ 0.66   0.602   0.6   0.06

○ 0.6   0.06   0.66   0.602

○ 0.06   0.66   0.6   0.606

8. Find the greatest common factor of:

   16 and 48 _____

9. Find the least common multiple of:

   8 and 4 _____

10. Write these decimals as fractions.

    0.6 = _____   0.88 = _____

11. Solve.

    $42.3 \div 3 =$ _____

    $908 \div 16 =$ _____

12. Choose the percents that are correctly written as decimals. There may be more than one correct answer.

    ○ 75% = 7.5
    ○ 25% = 0.25
    ○ 12% = 0.012
    ○ 8% = 0.08

13. Write these as percents.

    0.05 = _____%   1.725 = _____%   4/20 = _____%

PART C

Remember, show your work when possible.

1. Solve each problem and write the correct answer in simplest form.

$\frac{5}{7} \times 4 =$ _____

$\frac{2}{3} \times \frac{5}{6} =$ _____

$1\frac{2}{3} \div \frac{2}{3} =$ _____

$\frac{8}{17} \div \frac{4}{17} =$ _____

$18\frac{1}{2} \times 3\frac{1}{3} =$ _____

2. Find the answers.

The number 17 is what percent of 68? _____

The number 84 is 20% of what number? _____

What number is 35% of 264.8? _____

3. Evaluate the expression when $x = 7$.

$24x - 7 =$ _____

$5x^2 - 5 + 15 =$ _____

$2(x + 2) + 2x =$ _____

4. Evaluate the expression.

31^2 _____

12^3 _____

5. Solve the following:

Last year you earned $965 for baby-sitting. This year you earned 105% of last year's amount. How much did you earn this year?

A train covers 180 miles in 2 hours. How many miles can the train cover in 12 hours?

Sarah's garden has 25 tulips and 10 daffodils. What is the ratio of the number of tulips to the number of daffodils?

In the first week, Lois jogged 1 mile. In the second week, she jogged 3 miles. In the third week, she jogged 5 miles. In the fourth week, she jogged 7 miles. If Lois continues to increase the distance she jogs in this way, how many miles will she jog in the twentieth week?

A bus stops at every third corner. Another bus stops at every eighth corner. If both buses start at the same place, how many blocks from the starting point will both buses stop?

6. Find the unit rate.

   8 meters in 10 seconds _____

   286 miles in 5 ½ hours _____

7. Solve each equation.

   $-9k = 36$ $r/\text{-}8 = 64$

   $s - 3 = \text{-}4$ $b + \text{-}2 = 5$

8. Find the value for n.

   $-12 + 18 = n$

   $-18 \div 9 = n$

   $-9 - (\text{-}5) = n$

   $-4 - 13 = n$

PART D

1. Solve.

   $24 \div [18 \div (12-3)]$ $(-6)2 + -5$

   $-15 = c + 8$ $k - 1.8 = -10.5$

   $21 = \dfrac{h}{6}$ $-7x = -56$

   $1.6m - 0.2 = 3$ $\dfrac{b}{8} - 17 = 13$

   $0.3x + 0.8 = 1.4$

2. Find the value for **n**.

   $428 \times 7.1 = n$ $-12 + 18 = n$

   $3.4408 \div 0.092 = n$ $-18 \div 2 = n$

3. Rename the following as a terminating or repeating decimal.

   $\dfrac{9}{21}$ $5\dfrac{11}{25}$ $\dfrac{5}{3}$

4. Find the mean, median, mode, and range for this set of data: 10, 19, 25, 9, 10, 15, 3.

5. Solve.

   $1.6m - 0.2 = 3$ $\dfrac{b}{8} - 17 = 13$

   $0.3x + 0.8 = 1.4$

6. You have a dog walking business and earn $8 each time you walk a dog. You have already saved $30. How many dogs do you have to walk to earn $102 to buy a bike?

Equation: _____

Answer: _____

7. The product of two numbers is $3\frac{1}{4}$. One factor is $3\frac{5}{7}$. What is the other factor?
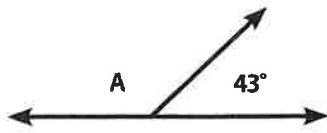
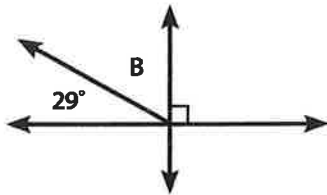8. Simplify these expressions.

$17c - 3 + 5 - 5c$

$8b - 12b + 10b$

9. Find the area of the shaded region.

20 cm

9 cm

6 cm

2 cm
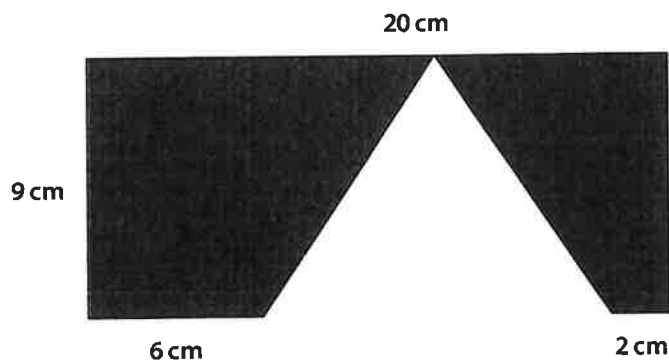
10. Find the measure of angle A without measuring.

11. Find the measure of angle B without measuring.

12. Write the ordered pairs you get when you use these x-coordinates to solve the equation: -5, 0, 4

Equation: $3x - y = 7$

13. Solve

$\sqrt{625}$ $\sqrt[3]{64}$

14. John wants to receive a 96% average on 4 math tests. So far he has taken 3 tests. His grades are 94%, 98%, and 98%. Write an equation in terms of f to find out what John must score on his fourth test in order to receive a 96% average.

Answer Key

CALVERT
EDUCATION

Evaluating the Placement Test

The Intermediate grade level placement tests are separated into five parts. Each part is designed to identify student readiness for the Calvert curriculum.

PART I: COMPOSITION

For this portion of the placement test, students are asked to write an essay on a given topic. Individual grade level guidelines are included within each answer key.

PART II: READING COMPREHENSION

Students are asked to read several reading passages and answer questions. Each section of this portion of the test corresponds with a grade level. Individual grade level guidelines are included within each answer key.

PART III: GRAMMAR

This portion of the placement test is the same for all students, however, the performance requirement is different for each grade level. Individual grade level guidelines are included within each answer key.

PART IV: CAPITALIZATION AND PUNCTUATION

This portion of the placement test is also the same for all students. The individual grade levels requirements vary and guidelines for each grade are included within each answer key.

PART V: MATH

Each section of this portion of the test also corresponds with a grade level and individual grade level guidelines are included within each answer key.

For a student to show readiness for a given grade level, mastery of the content for each prior grade level should be evident. For example, if your student takes the Grade 8 Placement Test, he should show readiness for Grades 5-8 as outlined in the answer key.

   If after evaluating your student's placement test, you still have questions, feel free to reach out to our Education Counselors by email: support@calvertservices.org or by phone at 888-487-4652, option 2.

WRITING GUIDELINES

Students showing readiness for Grade 7 should write a multi-paragraph composition with a clear thesis (topic) sentence and appropriate supporting details. The composition should include both compound and complex sentences as well as varied word choice. Subject-verb agreement is consistent, advanced vocabulary is evident, and there are few spelling and punctuation errors.

1. Write your composition on one of the subjects listed below.

2. Write neatly and erase clearly.

3. Use punctuation marks and capital letters where they belong.

4. Make sure your composition is orderly and well arranged.

5. You may ask an adult to help you spell words, but underline all such words.

6. Organize your thoughts prior to writing the composition by writing an outline or a rough draft. The final copy submitted should be your very best work. When you submit your composition with your test, you may include your outline or rough draft, if you choose.

NOTE: A child entering our Fourth Grade should be able to write about a 100-word composition, while a child entering our Eighth Grade should be able to write about a 200-word composition. This is a general guideline, however, and is not intended to restrict or force the child to write an exact number of words.

My Pets	**My Mother**	**My Father**
My Best Friend	**An Interesting Trip**	**Fun on Saturday**
My Dog	**An Exciting Day**	

THE TIME REQUIRED TO WRITE THIS COMPOSITION WAS _____ MINUTES.

Does the time you recorded above include any or all steps of preplanning (use of an organizer, writing a rough draft, editing, and writing final draft), or does it include only the writing of the composition? _____

_____

_____

_____

0417

SECTION A

The little red-roofed farmhouse was very old, its chimney crooked and even the small, shuttered windows tilted at angles. A bird's nest, wispy with straw, was half hidden in the corner where the roof met the wall above a bedroom window. Nearby, a gnarled tree was still speckled with a few apples now long past ripe.

Mama and Kirsti had gone inside, but Annemarie and Ellen ran across the high-grassed meadow, through the late wildflowers. From nowhere, a gray kitten appeared and ran beside them, pouncing here and there upon imagined mice, pausing to lick its paws, and then darting off again. It pretended to ignore the girls, but looked back often to be certain that they were still there, apparently pleased to have playmates.

The meadow ended at the sea, and the gray water licked there at damp brown grass flattened by the wind and bordered by smooth heavy stones.

"I have never been this close to the sea," Ellen said.

"Of course you have. You've been to the harbor in Copenhagen a million times."

Ellen laughed. "I mean the real sea, the way it is here. Open like this – a whole world of water."

© Number The Stars, by Lois Lowry

1. The words "licked there at damp brown grass" mean _____ .

   ○ the sea was slowly flooding the area

   ○ the grass was dead and needed water

   ● the sea water gently reached the meadow

   ○ the grass was dead because it had too much water

2. How is the word *speckled* used in the passage to describe the apple tree?

   ○ A large number of apples were hanging on the tree.

   ● A small number of apples were spread over the tree.

   ○ The apples in the tree had a disease.

   ○ The apples in the tree were rotten.

3. Based on references in the story, what season is it?

   ○ winter

   ○ spring

   ○ summer

   ● fall

4. According to the story, who saw the kitten?

   ○ Mamma and Kirsti

   ○ Ellen, Kirsti, Mamma, and Annemarie

   ○ Annemarie and Kirsti

   ● Ellen and Annemarie

5. Why does Ellen laugh?

   ○ She is happy being so close to the sea.

   ○ She is confused about the difference between a harbor and the sea.

   ● She sees humor in the fact that a harbor was compared to the sea.

   ○ She is embarrassed because she has not before seen the sea.

In 1598, Don Juan de Oñate (oh NYAH teh), a wealthy Spaniard, went out to settle new lands. He marched north from Central Mexico with a band of colonists, armed troops, and friars. The friars were members of a religious order who wanted to convert Native Americans to Christianity.

Over 16,000 Pueblo Indians lived in the area de Oñate claimed. The Pueblo were agricultural people with strong religious beliefs. The Spanish, however, believed the greatest kindness they could do for the Pueblo was to convert them to Christianity. To do this, the friars built missions, or church settlements, all over New Mexico. To protect the friars and their converts from the Apache and the Navajo, the Spanish built presidios, or forts. By 1680 a thin chain of missions and presidios stretched across the Southwest.

Many Pueblo continued to practice their religion in secret. When they were discovered, Spanish officials punished them. One of those punished was a spiritual leader named Popé (poh PEH). He believed the Spanish attempt to convert the Pueblo was harmful. Popé planned a revolt against the Spanish and got others to join him.

On August 10, 1680, Popé's followers rose up, burning churches and attacking haciendas. The Spanish fled south to El Paso. The Pueblo had driven the Spanish out of their land at least for a short time.

© Houghton Mifflin Company

1. Why did de Oñate travel north from Central Mexico?

   ○ He was visiting Popé.

   ● He wanted to settle new lands.

   ○ He was planning a revolt against the Spanish.

   ○ He wanted to stop the practice of Christianity.

2. Why did the Spanish want to convert the Pueblo to Christianity?

   ○ They thought that the Pueblo religion was incorrect.

   ○ They thought that the Pueblo wanted to be converted.

   ● The Spanish thought they were being kind.

   ○ They wanted to build presidios.

3. Why do you think the Pueblo practiced their religion in secret?

   ● They feared what would happen if the Spanish found out.

   ○ Their religion required them to practice in secret.

   ○ They thought that practicing their religion in secret would protect the Spanish from Popé.

   ○ The Spanish wanted them to practice their religion in secret.

4. What is the best title for this passage?

   ○ Native Americans Settle New Lands

   ● The Spanish Try to Convert the Pueblo

   ○ Popé Attacks the Pueblo

   ○ The Friars Revolt Against the Spanish

5. What is the best definition of *mission* as it is used in this passage?

   ○ the business with which a group is charged

   ○ an operational task, usually assigned by a higher headquarters

   ○ missionary duty or work

   ● a church settlement

SECTION B

Minnie May, aged three, was really very sick. She lay on the kitchen sofa, feverish and restless, while her hoarse breathing could be heard all over the house. Young Mary Joe, whom Mrs. Barry had engaged to stay with the children during her absence, was helpless and bewildered, quite incapable of thinking what to do, or doing it if she thought of it.

Anne went to work with skill and promptness.

"Minnie May has croup all right; she's pretty bad, but I've seen them worse. First we must have lots of hot water. I declare, Diana, there isn't more than a cupful in the kettle! There, I've filled it up, and, Mary Joe, you may put some wood in the stove. I don't want to hurt your feelings, but it seems to me you might have thought of this before if you'd any imagination. Now, I'll undress Minnie May and put her to bed, and you try to find some soft flannel cloths, Diana. I'm going to give her a dose of ipecac first of all."

Minnie May did not take kindly to the ipecac, but Anne had not brought up three pairs of twins for nothing. Down that ipecac went, not only once, but many times during the long, anxious night when the two little girls worked patiently over the suffering Minnie May, and Young Mary Joe, honestly anxious to do all she could, kept on a roaring fire and heated more water than would have been needed for a hospital of croupy babies.

It was three o'clock when Matthew came with the doctor, for he had been obliged to go all the way to Spencervale for one. But the pressing need for assistance was past. Minnie May was much better and was sleeping soundly.

© Anne of Green Gables, L.M. Montgomery

1. Based upon what is stated in the passage, which words might best describe Anne?

   ● knowledgeable and attentive
   ○ slothful and uninspiring
   ○ erratic and fickle
   ○ helpless and bewildered

2. Based on the passage, ipecac is probably a type of _____ .

   ○ food
   ○ clothing
   ● medicine
   ○ water

3. How did Anne know what to do to treat Minnie May's croup?

   ○ Anne read a book describing how to cure illnesses in children.
   ○ Matthew and the doctor gave her detailed instructions.
   ○ Anne had croup as a child and remembered how she had been cured.
   ● Anne helped raise three sets of twins, giving her experience in treating croup.

4. Which of the following is not an example of how other characters in the story assisted Anne in saving Minnie May's life?

   ○ Matthew went to Spencervale to fetch the doctor.

   ● Mrs. Barry cooked a pot of chicken soup.

   ○ Mary Joe tended to the fire and kept a supply of hot water on hand.

   ○ Diana helped locate soft, flannel cloths.

5. By the time the doctor arrived from Spencervale, Anne and the other girls probably felt _____.

   ● relief

   ○ disgust

   ○ frustrated

   ○ amused

Changing density can explain why an object floats or sinks. For example, you can change the density of water by freezing it into ice. Since water expands when it freezes, ice occupies more space than water. That's why ice is less dense than water. But it's just a little less dense! So most of an ice cube floating on the surface is below the water's surface.

You can make an object sink or float in a fluid by changing its density. The density of a submarine is increased when water fills its floatation tanks. The overall mass of the submarine increases. Since its volume remains the same, its density increases when its mass increases. So the submarine will dive. To make the submarine float to the surface, water is pumped out of it, decreasing its mass. Its density decreases, and it rises toward the surface.

You can also explain why a submarine dives and floats by means of the buoyant force. Since the buoyant force is equal to the weight of the displaced fluid, the buoyant force on the submerged submarine stays the same. Changing the water level in the flotation tanks changes the weight of the submarine. The submarine dives when its weight is greater than the buoyant force. It rises to the surface when its weight is less than the buoyant force.

© Prentice Hall

1. Which statement is incorrect?

   ○ The density of an object increases as the mass of that object increases.

   ● The density of an object cannot be changed.

   ○ An object will sink when its weight is greater than that of the buoyant force.

   ○ An object that is less dense than water will float.

2. Increasing the water level in the floatation tanks of a submarine causes the submarine to dive because the weight of the vessel is greater than that of the buoyant force. If the weight of a submerged object, such as a submarine, is equal to the buoyant force, the object will _____.

○ rise above the surface of the water

○ decrease in density

○ increase in mass

● remain submerged in the water

3. According to the text, why does only a small fraction of an iceberg appear above the surface of water?

● Ice is only slightly less dense than water.

○ The iceberg would melt if a larger portion of it was exposed to air.

○ The top of the iceberg weighs less than the bottom portion.

○ Water is slightly less dense than ice.

4. Which of the following is an example of when a person might have experienced the effects of buoyant force?

○ flying in an airplane

● swimming under water

○ freezing water to create ice cubes

○ boiling an egg

5. Fran's recipe for salad dressing calls for mixing oil and vinegar. She places both ingredients in the bowl and notices that the oil floats on top of the vinegar. What conclusion can Fran draw about oil and vinegar?

○ Vinegar is less dense than oil.

○ Vinegar has a greater density than air.

● Oil is less dense than vinegar.

○ Oil has a greater density than vinegar.

SECTION C

During the American Revolutionary War, under relentless British pursuit, the Continental (American) army kept retreating. British general John Burgoyne came up with a plan he hoped would quickly end the rebellion. However, at the village of Saratoga, New York, the Americans surrounded the British. After suffering heavy casualties, Burgoyne surrendered on October 17, 1777.

The Battle of Saratoga marked a major turning point in the war. The American victory ended the British threat to New England and destroyed British hopes of an easy victory. It also lifted Patriot spirits at a time when General Washington's army was suffering defeats. Perhaps most important, the Battle of Saratoga helped convince Europeans that the Americans had a sound chance of winning.

Soon after Saratoga, France agreed to openly support American independence. In February 1778, France officially formed an alliance with the United States. France was eager to weaken Britain. Even before Saratoga, the French had secretly supplied money and arms to the Americans. But the French did not want to take an open stand until it seemed the Americans might win. In February 1778, France became the first nation to sign a treaty with the United States.

France and its allies in the Netherlands and Spain also went to war with Britain. By carrying the fight to Europe and the Caribbean, the allies forced Britain to wage war on many fronts. This helped the American cause, because the British could spare fewer troops to fight in North America.

© Prentice Hall

1. What were three important results of the American victory at Saratoga?

   ○ raised the Patriot spirits; convinced Europeans that Americans could win the war; and opened up trading routes to the Caribbean

   ○ opened up trading routes to the Caribbean; France formed an alliance with the United States; ended British threat to New England

   ● lifted Patriot spirits; ended British threat to New England; and convinced Europeans that Americans could win the war

   ○ France signed a treaty with America; ended British threat to New England; increased the money available to fight the war

2. How did France aid the Patriot cause?

   ○ France loaned the Americans money to buy arms, food, and uniforms for the soldiers.

   ● France provided money and arms to the Patriots, and fought Britain in Europe.

   ○ French soldiers fought the British along side the Patriot troops in America.

   ○ France did not want to help the Americans because they were not sure that the Americans could win the war.

3. The word *relentless* in the sentence "During the American Revolutionary War, under relentless British pursuit..." means _____.

   ● unending and intense
   ○ constantly moving
   ○ extremely well planned
   ○ without focus

4. Pick the best title for this passage.

   ○ The Patriot Cause
   ● Saratoga: A Turning Point
   ○ British Alliance with France
   ○ A Treaty with France

5. What could have happened if the Americans had lost the Battle of Saratoga?

   ○ America might have become part of France.
   ● The British might have won the American Revolutionary War.
   ○ The British might have left New England.
   ○ The Americans might have convinced the Europeans to support them.

The Daffodils
By William Wordsworth

I wandered lonely as a cloud   (1)
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Continuous as the stars that shine   (7)
And twinkle on the Milky Way,
They stretched in never-ending line
Along the margin of a bay:
Ten thousand saw I at a glance,
Tossing their heads in sprightly dance.

The waves beside them danced; but they   (13)
Out-did the sparkling waves in glee:
A poet could not but be gay,
In such a jocund company:
I gazed-and gazed-but little thought
What wealth the show to me had brought:

For oft, when on my couch I lie   (19)
In vacant or in pensive mood,
They flash upon that inward eye
Which is the bliss of solitude;
And then my heart with pleasure fills,
And dances with the daffodils.

1. What is the meaning of the word *pensive* in line 20?

   ● deeply thoughtful
   ○ confused
   ○ extremely joyful
   ○ sad

2. Line 1 is an example of _____ .

   ○ a metaphor
   ○ rhyme scheme
   ● a simile
   ○ alliteration

3. What is the meaning of *inward eye* in line 21?

   ○ a camera lens
   ● personal memory
   ○ the lens of the eye
   ○ feelings

4. Which line is an example of personification?

   ○ Ten thousand saw I at a glance
   ● Tossing their heads in sprightly dance
   ○ What wealth the show to me had brought
   ○ And then my heart with pleasure fills

5. Which statement best describes the message of the poem?

   ○ Daffodils are beautiful and admired by many people.
   ○ Flowers dance in the spring breezes.
   ○ It can be lonely among a field of flowers.
   ● Upon reflection, the beauty of the daffodils brings happiness.

GRAMMAR GUIDELINES
The following section assesses grammar skills. Part III contains 38 possible correct answers. A student showing readiness for Grade 7 or 8 should be able to correctly answer at least 80% of these questions.

I. Carefully read each of the following groups of words. Put a check mark (✓) on the line only if the group of words is a complete sentence. Watch out! Punctuation marks do not necessarily mean complete sentences.

_____ 1. The children on the baseball team.

__✓__ 2. The playful kittens are fun to watch.

__✓__ 3. The boys climbed up to the tree house quickly.

_____ 4. Each of the children.

__✓__ 5. Teddy is a good swimmer.

II. Draw a line (/) between the complete subject and the complete predicate in the following sentences.

Example: The three little kittens / lost their mittens.

1. Most boys/enjoy sports.
2. Many pretty flowers/were blooming in Mary's garden.
3. The grandfather clock/struck twelve.
4. The eraser on that pencil/makes black streaks.
5. The parade/will pass down our street.
6. The packages/arrived in the morning mail.

III. Underline each verb phrase.

Example: My aunt from Kansas has arrived for a visit.

1. The wind is blowing from the South.
2. Motorcycles were roaring down the highway.
3. The children had been playing all morning.
4. The busy bees have been gathering nectar.
5. Their parents will be coming to the game.

IV. Underline all adjectives in these sentences. Do not underline the articles *a, an,* or *the.* The number in parentheses at the end of each sentence tells the total number of adjectives you should have marked.

Example: <u>Many</u> children sing in the <u>community</u> chorus. (2)

1. We saw a <u>beautiful</u>, <u>bright</u> light. (2)

2. The <u>tall</u>, <u>blond</u> girl brought an <u>empty</u> basket. (3)

3. The <u>spotted</u> dog ran to greet the <u>little</u> boy. (2)

4. The <u>black</u> cat has <u>white</u> whiskers. (2)

5. <u>Six</u> friends ate hamburgers at the <u>summer</u> picnic. (2)

V. Underline all of the adverbs in these sentences. The number in parentheses will tell you the number of adverbs in the sentence.

Example: The mayor <u>recently</u> came to the town meeting. (1)

1. That story <u>really</u> seems <u>quite</u> fantastic. (2)

2. The <u>usually</u> noisy playroom was <u>unusually</u> quiet. (2)

3. That speech was <u>unnecessarily</u> long. (1)

4. He <u>almost</u> <u>always</u> comes <u>here</u> with them. (3)

5. The children are playing <u>there</u> <u>quietly</u> <u>now</u>. (3)

Part IV. Punctuation & Capitalization

PUNCTUATION & CAPITALIZATION GUIDELINES
The following section assesses punctuation and capitalization skills. Part IV has 67 correctable errors. Students should be able to identify and correct at least 80% of these errors.

The sentences below are missing necessary periods, commas, apostrophes, question marks, exclamation marks, and quotation marks. Put the punctuation marks where they belong. Also add capital letters wherever needed by printing the capital on top of the small letter. (Do not rewrite the sentences.)

1. It's hard to guess how the puppy hurt its paw.

2. Mrs. Smith's house isn't very big.

3. "I will help you," he said.

4. This dog's tail is short, but those dogs' tails are shorter.

5. "May we come with you?" they asked.

6. Tom's address is 105 Tuscany Road, Baltimore, Maryland.

7. William Shakespeare, the great English poet, was probably born on April 23, 1564 in Stratford, England.

8. He wrote the plays Hamlet, A Midsummer Night's Dream, Macbeth, and many others.

9. "I've lost my pencil!" cried Jane. "Now what shall I do?"

> **MATH GUIDELINES**
> The following Math section is separated into three parts. Part A assesses readiness for Grade 5 and contains 27 questions. Students should score at least an 80% in this section in order to show readiness for this grade level. Part B assesses readiness for Grade 6 and there are 33 total questions. If your student correctly answers almost all questions in Part A and scores at least an 80% in Part C, then your student is ready for our Grade 6 course. If both sections A and B are almost completely correct and your student scores at least an 80% in Part C, which has 28 total questions, then your student is ready for the Grade 7 course. Finally, if your student correctly answers almost all questions in Parts A, B, and C, and scores at least an 80% in Part D, then your student is ready for the Grade 8 course. Part D has 22 questions.

Please show all your work when possible.

PART A

1. Solve.

    $3,542 + 7,256 + 4,984 =$ __15,782__

    $\$1,420 - \$720 =$ __\$700__

$$
\begin{array}{r}
804 \\
\times\ 219 \\
\hline
176,076
\end{array}
\qquad
\begin{array}{r}
3674 \\
\times\ \ 89 \\
\hline
326,986
\end{array}
\qquad
\begin{array}{r}
4321 \\
\times\ \ 96 \\
\hline
414,816
\end{array}
$$

$$
\begin{array}{l}
\ \ \ \ \ \ 1356.4 \text{ or } 1356 \text{ R2} \\
5\overline{)6782}
\end{array}
\qquad
\begin{array}{l}
\ \ \ \ \ \ 33.58\overline{3} \text{ or } 33 \text{ R56} \\
96\overline{)3224}
\end{array}
\qquad
\begin{array}{l}
\ \ \ \ 403 \\
8\overline{)3224}
\end{array}
$$

2. Solve and put the answer in simplest form.

$$\begin{array}{r} \dfrac{1}{8} \\ +\dfrac{6}{8} \\ \hline \dfrac{7}{8} \end{array}$$

$$\begin{array}{r} 17\dfrac{11}{13} \\ -\ 9\dfrac{7}{13} \\ \hline 8\dfrac{4}{13} \end{array}$$

$$\begin{array}{r} \dfrac{2}{8} \\ +\dfrac{4}{8} \\ \hline \dfrac{6}{8}=\dfrac{3}{4} \end{array}$$

$$\begin{array}{r} \dfrac{8}{4} \\ +\dfrac{1}{4} \\ \hline \dfrac{9}{4}=2\dfrac{1}{4} \end{array}$$

$$\begin{array}{r} \dfrac{9}{10} \\ +\dfrac{3}{10} \\ \hline \dfrac{12}{10}=1\dfrac{2}{10}=2\dfrac{1}{5} \end{array}$$

$$2-\dfrac{3}{5}=1\dfrac{2}{5}$$

$$\dfrac{3}{4}\times 4= 3$$

$$\dfrac{1}{4}\times 6= 1\dfrac{1}{2}$$

3. Choose the correct set of data that shows the mean, median, mode and range of the following set of numbers.
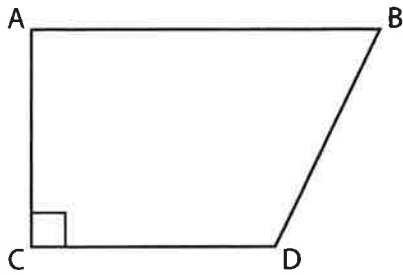
12 , 8, 7, 10, 8, 7, 8, 12

○ Mean – 72; Median – 16; Mode – 7; Range – 12
○ Mean – 72; Median – 9; Mode – 7; Range – 7
● Mean – 9; Median – 8; Mode – 8; Range – 5
○ Mean – 5; Median – 8, Mode – 9; Range – 8

4. Solve.

In a class of 30 students, 3/5 are girls. How many are girls? __18__

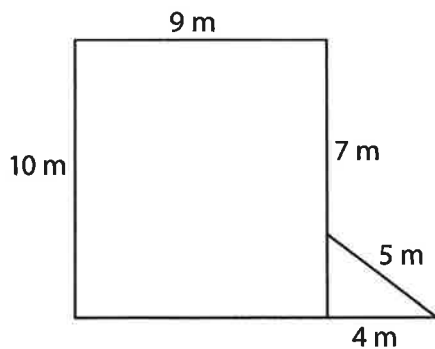Use the figure below to answer the following two questions.

5. Name a pair of parallel line segments.

○ $\overline{AB}$ and $\overline{BD}$
○ $\overline{AC}$ and $\overline{BD}$
● $\overline{AB}$ and $\overline{CD}$
○ $\overline{CD}$ and $\overline{BD}$

6. Name a vertical line segment.

○ $\overline{AB}$
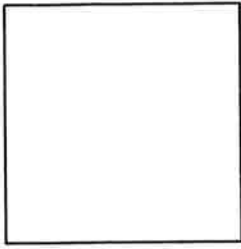● $\overline{AC}$
○ $\overline{AD}$
○ $\overline{DB}$

Use the figure below to answer the following questions.
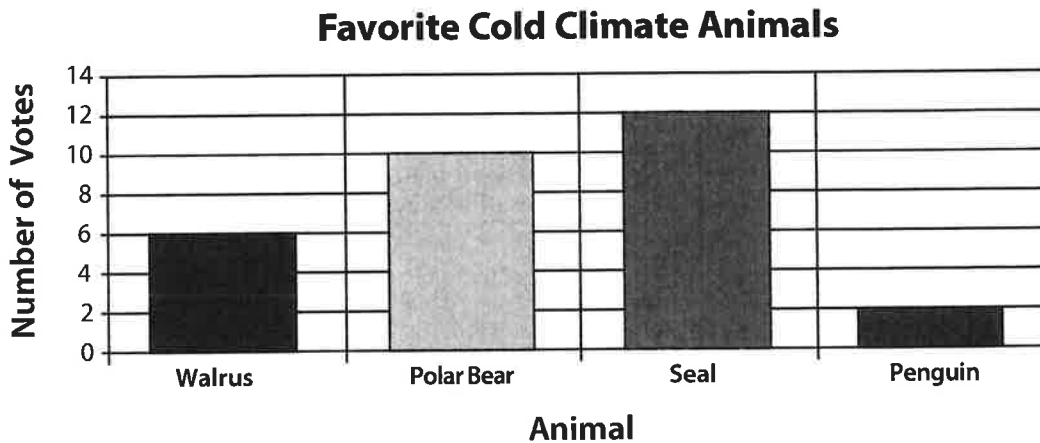

7. Find the perimeter of the figure. __44 m__

8. What is the area of the triangle? __6 m²__

9. Choose the correct number of lines of symmetry for this square.

○ 2
● 4
○ 6
○ 8

Use the graph showing favorite cold climate animals to answer the following questions.

Favorite Cold Climate Animals

10. How many total votes are shown? __30__

11. What is the difference between the animal that received the most votes and the animal that received the least votes? __10__.

12. A pair of pants costs $36.49. A shirt costs $24.95. Victor has $55.00. How much more money does he need to buy the pair of pants and the shirt? __$6.44__.

13. Sam jogged on Monday and Tuesday. He jogged 4.55 kilometers on Monday and 1.78 kilometers farther on Tuesday than on Monday. What was the distance he jogged on both days? __10.88 km__.

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PART B

Please show your work.

1. Solve these problems.

$$\begin{array}{r} 456 \\ \times 831 \\ \hline 378{,}936 \end{array}$$

$$\begin{array}{r} 6280 \\ \times 283 \\ \hline 1{,}777{,}240 \end{array}$$

$$8959 \div 289 = \underline{\,31\,}$$

$$21\overline{)52{,}576} \quad 2503 \text{ R}56$$

2. Choose the number statements below that are correct. There may be more than one correct answer.

- ● $\dfrac{2}{4} = \dfrac{15}{30}$

- ○ $\dfrac{9}{27} > \dfrac{5}{6}$

- ● $\dfrac{4}{3} > 1\dfrac{1}{4}$

- ○ $\dfrac{4}{12} < \dfrac{2}{24}$

3. Solve each problem and write the correct answer in simplest form.

$$\begin{array}{r} \frac{2}{3} \\ \frac{3}{4} \\ +\frac{5}{6} \\ \hline 2\frac{1}{4} \end{array} \qquad \begin{array}{r} 11\frac{2}{3} \\ -\frac{8}{9} \\ \hline 10\frac{7}{9} \end{array} \qquad \begin{array}{r} 6\frac{2}{3} \\ +1\frac{1}{6} \\ \hline 7\frac{5}{6} \end{array}$$

$$4\frac{4}{5} - 3\frac{2}{5} = \underline{1\frac{2}{5}} \qquad\qquad \frac{5}{8} + \frac{2}{3} = \underline{1\frac{7}{24}}$$

4. Write an equation for each of these word problems below and solve.

Jason sold 6 boxes of greeting cards with 18 cards in each box, and 12 boxes with 24 cards in each box. How many greeting cards did he sell?

Equation: $\underline{(6 \times 18) + (12 \times 24) = x}$

Answer: __396 cards__

Ralph spent $\frac{5}{9}$ of an hour mixing paints and $\frac{7}{9}$ of an hour painting. How much time in all did Ralph spend on his project?

Equation: $\underline{\dfrac{5}{9} + \dfrac{7}{9} = x}$

Answer: $\underline{1\frac{1}{3}}$ hrs or 1 hour 20 minutes

5. Solve these problems.

$5\frac{1}{2} \cdot (7\frac{1}{2} - 3\frac{1}{2}) =$ __22__

$125 \div 5 - 2 \times 8 =$ __9__

$19 - 5 + 2 \cdot 3 =$ __20__

6. Solve each problem and write the correct answer in simplest form.

$\frac{2}{3} \times \frac{5}{6} = \frac{5}{9}$ $\frac{5}{7} \times \frac{4}{6} = \frac{10}{21}$

$\frac{2}{4} \times 12 =$ __6__ $2\frac{1}{3} \times 2 = 4\frac{2}{3}$

$5 \times 4\frac{2}{3} = 23\frac{1}{3}$

7. Choose the answer that shows the decimals in order from least to greatest.

- ● 0.06   0.6   0.602   0.66
- ○ 0.66   0.602   0.6   0.06
- ○ 0.6   0.06   0.66   0.602
- ○ 0.06   0.66   0.6   0.606

8. Find the greatest common factor of:

   16 and 48 __16__

9. Find the least common multiple of:

   8 and 4 __8__

10. Write these decimals as fractions.

    $0.6 = \dfrac{3}{5}$ $0.88 = \dfrac{22}{25}$

11. Solve.

    $42.3 \div 3 = \underline{14.1}$

    $908 \div 16 = \underline{56.75}$

12. Choose the percents that are correctly written as decimals. There may be more than one correct answer.
    - ○ 75% = 7.5
    - ● 25% = 0.25
    - ○ 12% = 0.012
    - ● 8% = 0.08

13. Write these as percents.

    $0.05 = \underline{5}\%$ $1.725 = \underline{172.5}\%$ $4/20 = \underline{20}\%$

PART C

Remember, show your work when possible.

1. Solve each problem and write the correct answer in simplest form.

   $\frac{5}{7} \times 4 = \underline{2\frac{6}{7}}$ $\frac{2}{3} \times \frac{5}{6} = \underline{\frac{5}{9}}$ $1\frac{2}{3} \div \frac{2}{3} = \underline{2\frac{1}{2}}$

   $\frac{8}{17} \div \frac{4}{17} = \underline{2}$ $18\frac{1}{2} \times 3\frac{1}{3} = \underline{61\frac{2}{3}}$

2. Find the answers.

   The number 17 is what percent of 68? __25%__

   The number 84 is 20% of what number? __420__

   What number is 35% of 264.8? __92.68__

3. Evaluate the expression when $x = 7$.

   $24x - 7 = \underline{161}$

   $5x^2 - 5 + 15 = \underline{255}$

   $2(x + 2) + 2x = \underline{32}$

4. Evaluate the expression.

   31^2 __961__

   12^3 __1,728__

5. Solve the following:

   Last year you earned $965 for baby-sitting. This year you earned 105% of last year's amount. How much did you earn this year? **$1,013.25**

   A train covers 180 miles in 2 hours. How many miles can the train cover in 12 hours? **1,080 miles**

   Sarah's garden has 25 tulips and 10 daffodils. What is the ratio of the number of tulips to the number of daffodils? $\frac{5}{2}$ **or 5 to 2 or 5:2**

   In the first week, Lois jogged 1 mile. In the second week, she jogged 3 miles. In the third week, she jogged 5 miles. In the fourth week, she jogged 7 miles. If Lois continues to increase the distance she jogs in this way, how many miles will she jog in the twentieth week? **39 miles**

   A bus stops at every third corner. Another bus stops at every eighth corner. If both buses start at the same place, how many blocks from the starting point will both buses stop? **24 blocks**

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6. Find the unit rate.

   8 meters in 10 seconds __0.8 meters per second__

   286 miles in 5 ½ hours __52 miles per hour__

7. Solve each equation.

   $-9k = 36$ $k = -4$ $r/-8 = 64$ $r = -512$

   $s - 3 = -4$ $s = -1$ $b + -2 = 5$ $b = 7$

8. Find the value for n.

   $-12 + 18 = n$ $n = 6$

   $-18 \div 9 = n$ $n = -2$

   $-9 - (-5) = n$ $n = -4$

   $-4 - 13 = n$ $n = -17$

PART D

1. Solve.

   $24 \div [18 \div (12\text{-}3)] = \textbf{12}$ $(\text{-}6)2 + \text{-}5 = \textbf{-17}$

   $\text{-}15 = c + 8 = \textbf{-23}$ $k - 1.8 = \text{-}10.5 = \textbf{-8.7}$

   $21 = \frac{h}{6} \quad h = \textbf{126}$ $\text{-}7x = \text{-}56 \quad x = \textbf{8}$

   $1.6m - 0.2 = 3 \quad m = \textbf{2}$ $\frac{b}{8} - 17 = 13 \quad b = \textbf{240}$

   $0.3x + 0.8 = 1.4 \quad x = \textbf{2}$

2. Find the value for *n*.

$428 \times 7.1 = n$ **n = 3038.8** $-12 + 18 = n$ **n = 6**

$3.4408 \div 0.092 = n$ **n = 37.4** $-18 \div 2 = n$ **n = -9**

3. Rename the following as a terminating or repeating decimal.

$\frac{9}{21} = $ **0.$\overline{428571}$** $5\frac{11}{25} = $ **5.44** $\frac{5}{3} = $ **1.$\overline{6}$**
      or
   0.4285...

4. Find the mean, median, mode, and range for this set of data: 10, 19, 25, 9, 10, 15, 3.

   mean: 13
   median: 10
   mode: 10
   range: 22

5. Solve.

$1.6m - 0.2 = 3$ **m = 2** $\frac{b}{8} - 17 = 13$ **b = 240**

$0.3x + 0.8 = 1.4$ **x = 2**

6. You have a dog walking business and earn $8 each time you walk a dog. You have already saved $30. How many dogs do you have to walk to earn $102 to buy a bike?
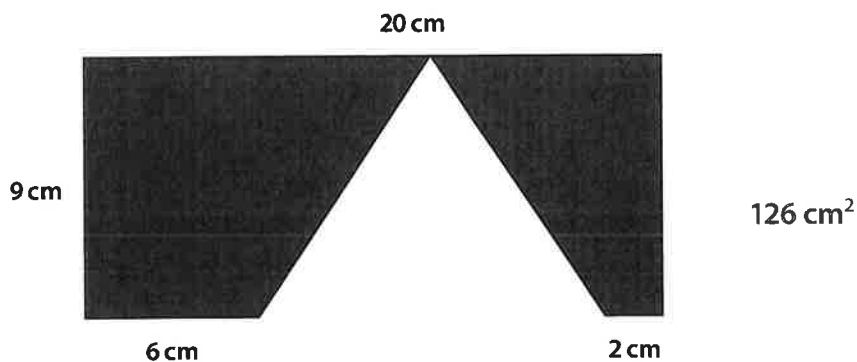
Equation: __$8x + 30 = 102$_____

Answer: __**9 dogs**____

7. The product of two numbers is $3\frac{1}{4}$. One factor is $3\frac{5}{7}$. What is the other factor?
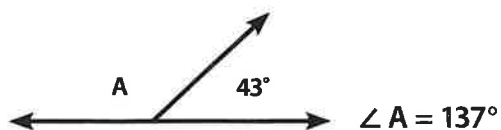
8. Simplify these expressions.
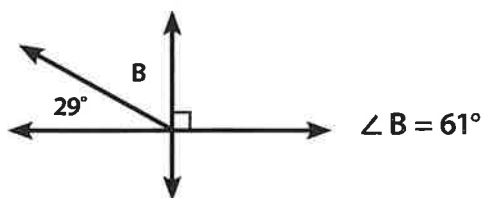
$17c - 3 + 5 - 5c$ **$12c - 2$**

$8b - 12b + 10b$ **$6b$**

9. Find the area of the shaded region.

20 cm

9 cm

6 cm   2 cm

126 cm²

10. Find the measure of angle A without measuring.

A   43°

$\angle A = 137°$

11. Find the measure of angle B without measuring.

B

29°

$\angle B = 61°$

12. Write the ordered pairs you get when you use these x-coordinates to solve the equation: -5, 0, 4

Equation: $3x - y = 7$ (-5, -22)

(0, -7)

(4, -5)

13. Solve

$\sqrt{625} = 25$

$\sqrt[3]{64} = 4$

14. John wants to receive a 96% average on 4 math tests. So far he has taken 3 tests. His grades are 94%, 98%, and 98%. Write an equation in terms of f to find out what John must score on his fourth test in order to receive a 96% average.

$$94 + 98 + 98 + f = 96(4)$$
$$f = 94$$