

TITUSVILLE LEARNING LAB

STUDY GUIDE

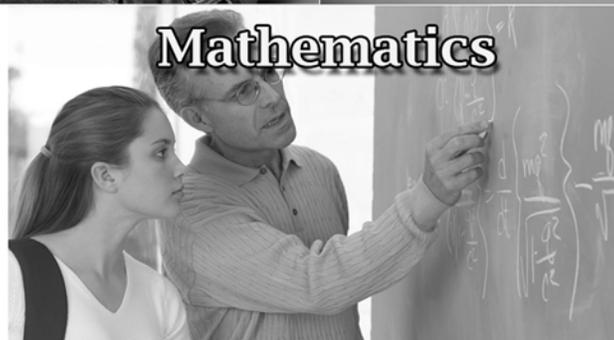
FOR

TABE



Reading

Language



Mathematics

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appointment, please call the
Titusville Learning Lab at

433-5034

Reading

Read the following passage and then answer questions 1-6.

The splintered steps leading to the tenement's entrance were rotted and uneven. They led to an unlocked door which wobbled on its hinges and shrank from its frame. It creaked open to a dank, dark hall which smelled of urine and sweat. The paint was peeling off cracked walls. The faint yellow light hung low in the night.

Mr. and Mrs. Gomes lived on the second floor with their three young children. Their four-room apartment was immaculate and tidy. The kitchen floor glistened, and the flowered plates and glasses were neatly stacked in the drainer.

In the living room, the sheer curtains were always drawn back, filtering sunlight throughout the room, passing over a color television and several porcelain icons. Besides the freestanding gas heater was a brand name stereo system recently purchased on an "easy pay" credit plan.

The soft pine floors were all warped but recently painted. The wide floorboards, once loose in many places, were now nailed down securely. Clear plastic sheets were tacked over the windows to prevent heat loss.

The children, two girls and a boy, shared a large room with one small window that was separated from the kitchen by a curtain. The gas stove "warmed" them at night. Their toys were piled high in wooden crates. The children did not dare turn on the kitchen light for fear that the six-legged, brown-bodied pests would dart out in front of them.

The Gomes family had rented this apartment for ten years, ever since they came to this country. They had known no other home, although they had dreamed of many. Some day they hoped to live in a quiet neighborhood with open yards and spotless sidewalks, where people get into cars each weekday morning and commute to work.

1. You can infer that the story takes place in the
 - a. summer
 - b. spring
 - c. fall
 - d. winter
 - e. none of the above
2. In the third paragraph the word icons means
 - a. fine china plates
 - b. ornate lamps
 - c. religious figures
 - d. ashtrays
 - e. none of the above
3. You can conclude that the Gomes family members are
 - a. native Americans
 - b. United States citizens
 - c. Chinese
 - d. immigrants
 - e. second generation Americans
4. What would be the opposite meaning of the word immaculate in the second paragraph?
 - a. filthy
 - b. girlish
 - c. clean
 - d. horrible
 - e. modern
5. What can you infer about the children's bedroom?
 - a. It is well furnished.
 - b. It is crowded.
 - c. It has its own bathroom.
 - d. It is well lighted.
 - e. It is pest-free.
6. The pests mentioned at the end of the passage are probably
 - a. ants
 - b. mice
 - c. rats
 - d. moths
 - e. cockroaches

Read the following passage and choose the best answer for items 7 – 12.

What was Grandpa Tweedy Like?

Then there was Grandpa Tweedy, my daddy's daddy out in Banks County. He talked hard times morning, noon, and night. Called himself a farmer; but you never saw him behind a plow or driving a team. Like the lilies of the field in the Bible, he toiled not, neither did he spend his own money. He was always asking Papa to help him out. All he ever did was sit on the porch and swat flies, and like I said, even had him a pet hen to peck them up.

When Papa left the farm at sixteen to go work for Grandpa Blakeslee, he made twenty dollars a month and had to send half of it home to pay the field hand who took his place. That was the custom. But even after Papa married at nineteen, making forty dollars a month, he still had to send Grandpa Tweedy ten of it, till the day he was twenty-one. My mother never said she didn't like her father-in-law, but I could tell she didn't, and that may have been why.

What started me hating him, he wouldn't let me fish on Sunday. Said it was a sin. I remember I put out some set hooks late one Saturday, thinking if I caught a fish, it wouldn't be a sin to take him off the hook next morning. End his suffering, you know. Early Sunday I ran down to the river and one of the lines was just a jigging! But when I ran up the hill and asked Grandpa's permission to get my fish off the hook he said, "Hit'll still be thar t'morrer, Lord willin'. The Lord ain't willin', it'll be gone. Now git in the house and study your catechism till time to leave for preachin'."

Of course the fish was gone Monday morning. But I got back at Grandpa Tweedy. I'd noticed a big hornet's nest in the privy, just under the tin roof, so I bided my time behind a tree till I saw him go in there. Giving him just long enough to get settled good, I let fly with a rock and hit that tin roof like a gunshot...

7. The statement "All he ever did was sit on the porch and swat flies" is a restatement of
- a. "he toiled not"
 - b. "he talked of hard times"
 - c. "called himself a farmer"
 - d. "neither did he spend his own money"
 - e. "even had him a pet hen to peck them up"

8. Which of the following actions would you expect Grandpa Tweedy to take?
- He would be the first man to fix anything that needed fixing.
 - He would tend his lilies night and day just like in the Bible.
 - He would talk for hours on end about his incredible good fortune.
 - He would be glad to lend a helping hand to his children.
 - He would let a fence fall down before he would repair it.
9. Which statement reflects the most likely reason that Papa sent money home to Grandpa Tweedy?
- Papa was paying back his father for money loaned to him for school.
 - Children have a moral obligation to support parents who cannot support themselves.
 - Papa felt guilty for having left the farm.
 - Papa felt guilty for not having brought his wife back to the farm to live.
 - Grandpa Tweedy did not like to spend his own money, so he asked Papa to help out.
10. What happened when the speaker told Grandpa Tweedy about the fish?
- Grandpa said it was a gift from God.
 - Grandpa refused permission to take the fish off the hook.
 - Grandpa gave his permission to get the fish.
 - Grandpa said to wait until after preaching.
 - Grandpa got angry at the speaker.
11. Which of the following is the best summary of what happened in the last paragraph?
- The speaker started hating Grandpa Tweedy.
 - Grandpa threw a rock at the privy.
 - The fish got away from the hook.
 - The speaker stirred up the hornets while Grandpa was in the outhouse.
 - The speaker set a trap for grandpa by hiding a hornet's nest in a tree.
12. How did the speaker justify taking the fish off the hook?
- The speaker planned to ask Grandpa's permission to get the fish off the hook.
 - The speaker said that if it were done on Saturday, it would not be a sin.
 - The speaker thought that it would be almost a good deed.
 - The speaker told Grandpa that it was less work that way.
 - The speaker planned to study the catechism as soon as the fish was off the hook.

Using the form provided and the conversation below, answer questions 13 – 18.

To: _____	
Date: _____	Time: _____
WHILE YOU WERE OUT	
M _____	
Of _____	
Phone Numbers	
Office	<input type="checkbox"/> Telephoned
Voicemail	<input type="checkbox"/> Please Call
FAX	<input type="checkbox"/> Returned your call
Pager	<input type="checkbox"/> Called to see you
Mobile	<input type="checkbox"/> Will call again
E-mail	<input type="checkbox"/> Urgent!
Message	

Operator: _____	

Ms. Wilson: Peabody Incorporated, Purchasing, May I help you?

Mr. Richards: This is Ralph Richards, of Widget Industries. I need to speak to Sam Waters.

Ms. Wilson: I'm sorry Mr. Waters is in a meeting. I'm Sara Wilson, his assistant, is there anything I can do for you, or may I take a message.

Mr. Richards: Kyle Kirby, my line manager, and Sam spoke yesterday over lunch, and your boss was interested in the aluminum alloy coated widgets we produce for Cramer Manufacturing. Sam wanted a price on 5 gross of #6 stainless steel widgets. If you could tell him that the price would be \$365.82 tax and delivery included. There would be no extra charge for next day delivery either since we're just down the road. If he has any questions he can call me at 555-6210, extension 1101.

Ms. Wilson: Thank you, Mr. Richards. I'll see that he gets the message.

13. Whose name should be written on the top line of the form next to the word To?
- Sara Wilson
 - Ralph Richards
 - Sam Waters
 - Kyle Kirby
14. Whose name should be written on the line next to the letter M?
- Sara Wilson
 - Ralph Richards
 - Sam Waters
 - Kyle Kirby
15. What information need not be included in the message?
- Kyle Kirby is a line manager.
 - 5 gross of widgets cost \$365.82.
 - No extra charge for next day delivery.
 - Extension 1101
16. Which box would most likely be checked for this phone message?
- Urgent!
 - Wants to see you
 - Telephoned
 - Returned your call
17. The second time Mr. Richards speaks he uses the word "interested," which of the following words has the opposite meaning?
- apathy
 - responsive
 - concerned
 - callous
18. The second time Mr. Richards speaks he uses the word "questions," which of the following words has the same meaning?
- interrogation
 - inquiries
 - assumptions
 - ideas

Read the following poems and answer the corresponding questions.

Man on Wheels, by Karl Shapiro

Cars are wicked, poets think
Wrong as usual. Cars are part of man.
Cars are biological.
A man without a car is like a clam without a shell.
Granted, machinery is hell,
But carless man is careless and defenseless.
Ford is a skin of present animal.
Automobile is shell.
You get yourself a shell or else.

19. What is meant by the phrase, "Ford is skin of present animal?"
- a. There is a new animal living today called a Ford.
 - b. Cars are as much a part of people's lives today as their own skin.
 - c. People should buy Fords, not GM cars.
 - d. Modern life is too full of machinery.
 - e. If you cannot have a skin, you need a shell.
20. What is the poet's basic attitude toward cars?
- a. Cars are wicked.
 - b. Cars and other machines are hell.
 - c. Cars are a necessary part of modern life.
 - d. Clams should drive cars.
 - e. A man without a car does not have a care in the world.

Where the Wind Went Crazy, By Joyce Carol Oates

the tops of the palm trees are smashed
palm leaves hang, down shredded
limp and light as threads
the trunks like concrete
that never lived

mammoth towers
uninhabited

I feel the two of us grown to
mammoth towers
our heads dizzied by the height
time is piled beneath us
blocks pushing us up
there is motion of nerves between us
strung between us like wires

lovers, we need no hurricane
to make war upon each other
and each cell of our living tissue
is at peace

21. Why does the poet describe palm trees?
- She likes palm trees.
 - She is comparing palm trees and telephone poles.
 - She is comparing lovers to palm trees torn up by a hurricane.
 - She is comparing palm trees to a hurricane.
 - She is comparing palm trees to empty apartment buildings.

22. Which statement below best describes what the poet means by “there is motion of nerve between us strung between us like wires?”
- She feels like a palm tree.
 - There is a sense of tension, like electricity, between the lovers.
 - The hurricane makes her nervous.
 - She feels like a tower.
 - She is insane.

Mathematics Review

Computation

Directions: Complete the following operations. Reduce fractions to simplest terms.

1.
$$\begin{array}{r} 53 \\ + 6248 \\ \hline \end{array}$$

a. 6311
b. 6301
c. 6201
d. 6291

6.
$$\begin{array}{r} 5.4 \\ + 3.073 \\ \hline \end{array}$$

a. 8.473
b. 8.0473
c. 8.13
d. 9.13

2.
$$\begin{array}{r} 1283 \\ - 621 \\ \hline \end{array}$$

a. 662
b. 562
c. 682
d. 762

7.
$$\begin{array}{r} 7.45 \\ - 0.38 \\ \hline \end{array}$$

a. 7.7
b. 6.7
c. 7.07
d. 6.07

3.
$$\begin{array}{r} 134 \\ - 89 \\ \hline \end{array}$$

a. 65
b. 55
c. 50
d. 45

8.
$$\begin{array}{r} 950.3 \\ \times 7.4 \\ \hline \end{array}$$

a. 7032.22
b. 703.222
c. 7032.12
d. 70322.2

4. $16 \times 10 =$

a. 1.6
b. 16
c. 160
d. 1600

9. $253.356 \div 2.58 =$

a. 89.2
b. 96.4
c. 98.4
d. 98.2

5.
$$\begin{array}{r} 84 \overline{) 2100} \end{array}$$

a. 15
b. 25
c. 35
d. 45

10. $958 \div 4 =$

a. 239.05
b. 239.5
c. 240
d. 239.6

11.
$$\begin{array}{r} \underline{\hspace{2cm}} \\ 3.8) 494 \end{array}$$
 a. 0.13
 b. 1.3
 c. 13
 d. 130

16.
$$\begin{array}{r} 3 \frac{1}{2} \\ + 2 \frac{2}{6} \\ \hline \end{array}$$
 a. 6
 b. 5
 c. $6 \frac{5}{5}$
 d. $5 \frac{5}{6}$

12.
$$\begin{array}{r} \frac{3}{8} \\ + \frac{2}{8} \\ \hline \end{array}$$
 a. $\frac{5}{8}$
 b. $\frac{5}{16}$
 c. $\frac{8}{16}$
 d. $\frac{32}{8}$

17.
$$\begin{array}{r} 5 \frac{1}{3} \\ - \frac{3}{4} \\ \hline \end{array}$$
 a. $4 \frac{1}{3}$
 b. $4 \frac{7}{12}$
 c. $3 \frac{1}{3}$
 d. $3 \frac{5}{12}$

13.
$$\begin{array}{r} 4 \frac{1}{7} \\ + \frac{3}{7} \\ \hline \end{array}$$
 a. 5
 b. $4 \frac{4}{14}$
 c. $4 \frac{4}{7}$
 d. $5 \frac{4}{7}$

18. $1 \frac{1}{2} \times \frac{3}{7} =$
 a. $1 \frac{3}{14}$
 b. $\frac{3}{14}$
 c. $\frac{9}{14}$
 d. $1 \frac{4}{9}$

14. $\frac{5}{8} \times \frac{2}{6} =$
 a. $\frac{10}{12}$
 b. $\frac{5}{24}$
 c. $\frac{7}{14}$
 d. $\frac{5}{12}$

19. $\frac{7}{8} \div \frac{1}{4} =$
 a. $2 \frac{1}{3}$
 b. $3 \frac{1}{2}$
 c. $2 \frac{2}{3}$
 d. $3 \frac{1}{3}$

15.
$$\begin{array}{r} \frac{9}{13} \\ - \frac{5}{13} \\ \hline \end{array}$$
 a. $\frac{5}{13}$
 b. $\frac{4}{13}$
 c. 4
 d. $\frac{4}{0}$

20. $6 \frac{2}{3} \div 2 \frac{4}{6} =$
 a. $\frac{6}{2}$
 b. 3
 c. $2 \frac{1}{4}$
 d. $2 \frac{1}{2}$

21. 10% of 16 =
 a. 0.16
 b. 1.6
 c. 16
 d. 10

22. 70% of 32 =
a. 2.24
b. 22.4
c. 24.2
d. 2.42

23. $20 - (-3) =$
a. 23
b. 17
c. 60
d. none of these

24. $-6 + 5 + 8 =$
a. 5
b. 6
c. 7
d. 8

25. $\square\%$ of 50 = 40
a. 50%
b. 60%
c. 70%
d. 80%

26. 6% of $\square = 36$
a. 500
b. 600
c. 700
d. 800

27. $6x + x =$
a. $7x$
b. $6 + xx$
c. $6 + x^2$
d. $6x^2$

28. $7ab - 2ab =$
a. $5a + 5b$
b. $5ab$
c. $5 - ab$
d. $5a^2b^2$

29. $3^3 \times 3^2 =$
a. 33^{32}
b. 3^6
c. 3^5
d. 9^5

30. $100 \times (-4) =$
a. 400
b. -400
c. -25
d. 25

Applied Mathematics

1. What is the product of 306 and 15?
 - a. 321
 - b. 4590
 - c. 20.4
 - d. 291
2. What is 12, 536 rounded to the nearest thousand?
 - a. 12, 000
 - b. 13,000
 - c. 12,500
 - d. 12,600
3. What is the value of the digit 5 in the number 45,782?
 - a. ten
 - b. hundred
 - c. thousand
 - d. ten thousand
4. Sue is selling tickets. One day she sold 86 tickets and 135 another. What is the total number of tickets she sold?
 - a. 221
 - b. 995
 - c. 49
 - d. 231
5. A bus holds 50 passengers. How many buses are needed to carry 270 students on a field trip?
 - a. 3
 - b. 4
 - c. 5
 - d. 6
6. Write the letter choice for the number, one hundred fifty-six thousand thirty-two.
 - a. 156,320
 - b. 15,632
 - c. 156,032
 - d. 156,023
7. In a shipment of 11,268 eggs, 1,319 were broken. How many eggs were not broken?
 - a. 9,949
 - b. 10,49
 - c. 8,949
 - d. 1,319
8. An airplane traveled 1,824 miles in 3 hours. What was its average speed in miles per hour?
 - a. 500 miles per hour
 - b. 554 miles per hour
 - c. 608 miles per hour
 - d. 723 miles per hour

9. Rosa came to school with 18 pencils. She lost 8 of them, then she was given 10, and then she gave 6 to friends in class. How many did she have left?
- 13
 - 14
 - 15
 - 16
10. Which two fractions are equivalent?
- $\frac{3}{4}$ and $\frac{9}{12}$
 - $\frac{4}{8}$ and $\frac{1}{4}$
 - $\frac{4}{8}$ and $\frac{20}{36}$
 - $\frac{2}{5}$ and $\frac{3}{4}$
11. Ms. Smith bought $\frac{1}{2}$ pound of apples, $\frac{3}{4}$ pound of grapes, and $\frac{1}{3}$ pound of lemons. How many pounds of fruit did she buy?
- $1\frac{2}{5}$
 - 2
 - $1\frac{7}{12}$
 - $2\frac{1}{8}$
12. Bill spent $\frac{2}{3}$ of an hour swimming and $\frac{5}{6}$ of an hour jogging. How much longer did he jog than swim?
- $\frac{1}{6}$
 - $\frac{1}{2}$
 - $\frac{1}{3}$
 - $\frac{2}{5}$
13. Which number should appear to complete the following sequence?
312, 315, 318, \square , 324, 327
- 319
 - 320
 - 321
 - 323
14. Arrange the following numbers in order from least to greatest.
3.45, 4.05, 4.54, 3.02, 23.0
- 23.0, 3.45, 3.02, 4.05, 4.54
 - 23.0, 3.02, 3.45, 4.05, 4.54
 - 3.02, 3.45, 4.05, 4.54, 23.0
 - 23.0, 3.45, 3.02, 4.05, 4.54
15. Which of the following number sentences is true?
- $3.456 < 3.82$
 - $6.32 > 7.241$
 - $12.09 > 20.3$
 - $1.08 < 1.009$
16. Mr. Jones spent \$34.50 on dinner and left a 15% tip. How much money did he spend in the restaurant all together?
- \$34.50
 - \$5.18
 - \$39.68
 - \$41.52
17. A baseball team won only 20 percent of the games it played. If it played 25 games, how many games did it win?
- 12
 - 9
 - 8
 - 5

18. Mrs. Brown bought a video cassette recorder for \$450. She made a down payment of \$50 and agreed to pay the balance in monthly installments of \$40. How many monthly payments will Mrs. Brown make?

- a. 5
- b. 10
- c. 15
- d. 20

19. On a hike Mike walked 5 miles in 2 hours. At this rate how far will he walk in 7 hours?

- a. 14.5
- b. 14
- c. 17.5
- d. 17

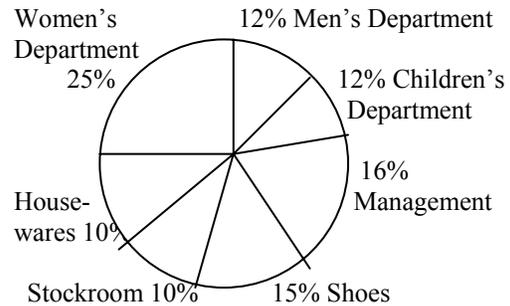
20. On a map, 1 centimeter represents 10 kilometers. If two cities are 1.5 centimeters apart on the map, what is the actual distance between them in kilometers?

- a. 10
- b. 15
- c. 20
- d. 25

21. If a used pencil measures 9.32 centimeters. How long is it in millimeters?

- (1cm – 10 mm)
- a. .0932 mm
 - b. 90.32 mm
 - c. 93.2 mm
 - d. 932 mm

The Circle Graph shows the percentage of employees working in each are of a department store. There are 200 total employees. Study the graph and answer questions 22 – 24.



22. Which 2 departments employs 31% of the employees?

- a. Children's and Men's
- b. Housewares and Stockroom
- c. Housewares and management
- d. Management and shoes

23. How many people are employed in housewares and the stockroom?

- a. 30
- b. 25
- c. 40
- d. 45

24. Which department employs 50 people?

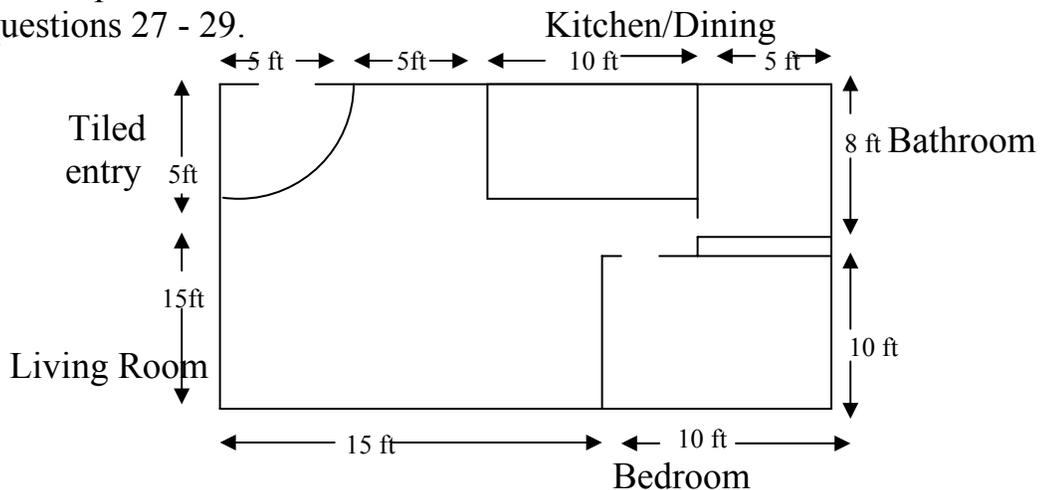
- a. Women's
- b. Management
- c. Shoes
- d. Children's

25. What is the average of the following list of test scores?
75, 84, 92, 89, 96, 80
- 83
 - 86
 - 89
 - 91
26. What is the selling price of a \$750 stereo if it is on sale at 15% off?
- \$112.50
 - \$637.50
 - \$527.50
 - \$700.00

Before the new tenants can move in some remodeling must be done.

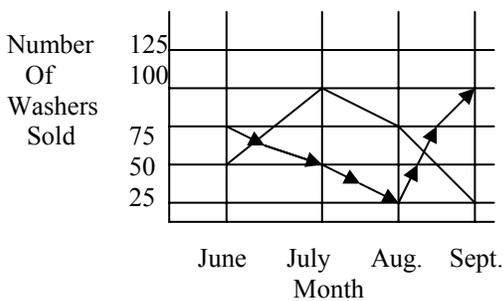
27. The entry has to be retiled. How many square feet of tile will be needed?
- 25 ft^2
 - 19.625 ft^2
 - 81.225 ft^2
 - 47.625 ft^2
28. There will have to be new linoleum on the bathroom floor. Linoleum is on sale at the local building supply center for \$2.25 a square foot. What will it cost to redo the bathroom floor?
- \$90.00
 - \$100.00
 - \$115.00
 - \$125.00

Look at the floor plan below for an apartment answer questions 27 - 29.



29. Carpet is on sale. The manager will need to buy 325 sq.ft. to recarpet the apartment. The regular price per square foot is \$12.50; the sale price is \$9.50. How much will the manager save by buy the carpet on sale?
- \$550
 - \$625
 - \$890
 - \$975
30. Manager was charging \$450 a month for a one-bedroom apartment. After the remodel he will charge \$525 a month. He has 6 1-bedroom units. How much more will be make in rent each month?
- \$380
 - \$400
 - \$425
 - \$450

This double-line graph shows the number of dishwashers sold during a four month period by Harry's Appliances and AAA Appliances. Study the graph. Then do numbers 31 and 32.



Harry's

AAA

31. During which month were the greatest number of dishwashers sold.
- June
 - July
 - August
 - September
32. During which month did Harry's sell twice as many dishwashers as AAA?
- June
 - July
 - August
 - September
33. Which of the following means $7n - 5 = 6$?
- 7 less than 5 times a number is 6
 - 5 less than 6 times a number is 7
 - 5 less than 7 times a number is 6
 - 6 less than 5 times a number is 7
34. Which of the following means $x^2 + 3 = 12$?
- 3 more than a number squared is 12
 - 3 more than 2 times a number is 12
 - 12 less than 3 times a squared number
 - 3 less than a number squared is 12.

35. Which of these is another way to write $3 \times 3 \times 3 \times 3$?
- 12×4
 - $3/4$
 - 3×4
 - 3^4
36. What is the sum when 10,325 and 9,672 are rounded to the nearest thousand and then added?
- 19,000
 - 20,000
 - 21,000
 - 22,000
37. If $8x - 5 = 27$, then $x =$
- 4
 - 5
 - 6
 - 7
38. If $8m + 6 = 46$, then $m =$
- 3
 - 4
 - 5
 - 6
39. Which value of n will make this number sentence true?
 $4n - 3 < 1$
- 0
 - 1
 - 2
 - 3
40. What is another way to write the following fraction?
 $\frac{29}{7}$
- $3 \frac{8}{7}$
 - $4 \frac{1}{7}$
 - $3 \frac{1}{7}$
 - $4 \frac{3}{7}$
41. What is another way to write the following fraction?
 $\frac{15}{25}$
- 0.06
 - 0.006
 - 0.6
 - 6.0
42. The perimeter of a hexagon shaped garden is 125 feet. Three of the sides add up to 74 feet. The other three sides are of equal length. What is the length of these remaining sides.
- 23 feet
 - 10 feet
 - 12 feet
 - 17 feet

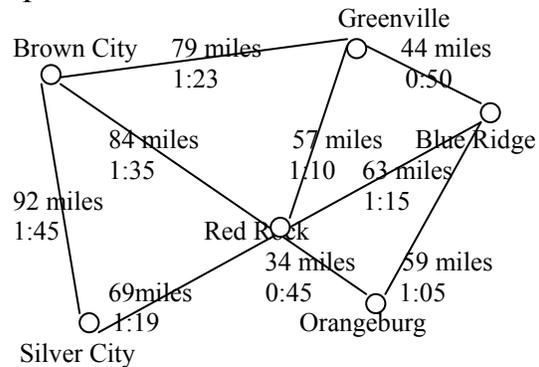
This is a list of ingredients needed to make 12 cup cakes. Study the list, then do questions 43 – 46.

<u>Ingredients</u>
2 ½ cup of flour
2 cup sugar
¾ cup cocoa
1 tsp. Vanilla
¼ tsp. Baking powder
½ tsp. Salt
½ cup melted butter
1 cup milk
2 eggs

43. How much salt and baking powder together is needed to make 36 cup cakes?
- ¾ teaspoons
 - 1 ½ teaspoons
 - 2 teaspoons
 - 2 ¼ teaspoons
44. How many cups of flour are needed to make 6 cup cakes?
- 1 cup
 - 1 ¼ cup
 - 1 ½ cup
 - 2 cups
45. How much butter and milk together is needed to make a double batch of cup cakes?
- 1 ½ cups
 - 2 cups
 - 2 ½ cups
 - 3 cups

46. How much sugar is needed to make 3 cup cakes?
- ½ cup
 - 2/3 cup
 - ¾ cup
 - 1 cup

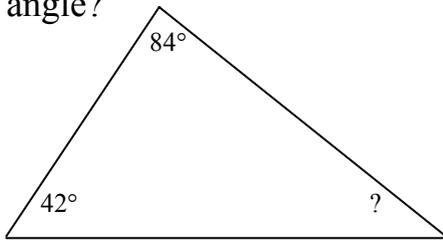
A team must travel for their away games. Study the following map that shows distances and traveling times between cities. Answer questions 47 – 49.



47. What is the distance from Silver City to Greenville when driving through Red Rock?
- 116 miles
 - 126 miles
 - 136 miles
 - 146 miles
48. What is the estimated driving time when travelling from Brown City to Blue Ridge through Greenville?
- 2 hours
 - 1 hours 53 minutes
 - 3 hours
 - 2 hours 13 minutes

49. To go from Orangeburg to Greenville is it quicker to go through Blue Ridge or Red Rock?
- quicker through Blue Ridge
 - quicker through Red Rock
 - the same time
 - not enough information

50. The sum of the inside angles of a triangle always equals 180° . What is the measurement of the missing angle?



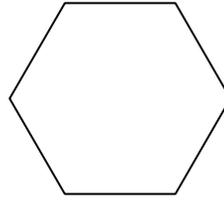
- 180°
- 126°
- 54°
- 64°

Identify the following shapes



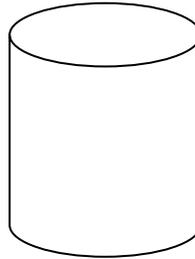
- acute triangle
- right triangle
- scalene triangle
- obtuse triangle

52.



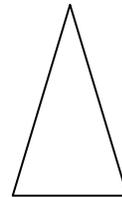
- parallelogram
- octagon
- hexagon
- pentagon

53.



- cylinder
- sphere
- trapezoid
- parallelogram

54.



- equilateral triangle
- obtuse triangle
- scalene triangle
- isosceles triangle

Language

For Numbers 1 through 8, decide which punctuation mark, if any, is needed in the sentence.

1. The car needs to be washed vacuumed, and polished.
a. , b. ; c. “ d. None
2. I'm not going to spend \$100 on towels
a. ? b. ! c. . d. None
3. The band took a break and everyone stopped dancing.
a. , b. ; c. ‘ d. None
4. “I'm in agreement with that statement, said Bill.
a. ! b. , c. ” d. None
5. We had to go home, but we promised to return later.
a. , b. ; c. ! d. None
6. The teacher asked, Billy, will you empty the pencil sharpener?”
a. , b. “ c. : d. None
7. “Who in the world,” the sleepy man asked, “would phone at this hour”
a. , b. “ c. ? d. None
8. How was the test Mary?
a. , b. “ c. ; d. None

For Numbers 9 through 15, choose the word or phrase that best completes the sentence.

- | | |
|---|---|
| 9. There —— a good sale at the department store tomorrow.
a. are
b. is
c. will be
d. has been | 10. With hard work, someone with his talent _____ bound to succeed.
a. is
b. are
c. were
d. can |
|---|---|

11. Last night, Anna's husband _____ not want to go to the movie either.
- does
 - do
 - did
 - don't
12. Sam swam _____ than Mike when they tried out for the swim team at school.
- fast
 - faster
 - fastest
 - more fast
13. After Sally got her term paper typed, she was very proud of _____ .
- itself
 - himself
 - her
 - herself
14. The _____ test papers were lost when the teacher's classroom was broken into.
- students
 - student's
 - students'
 - students's
15. When Cathy went into labor, Mike drove _____ to the hospital.
- quick
 - quickly
 - more quick
 - quickest

For Numbers 16 – 25, choose the sentence that is written correctly and shows the correct capitalization and punctuation. Be sure the sentence you choose is complete.

16. a. I was rised on a farm in Oklahoma.
b. Please rise your voice, I can't hear you.
c. Matt raised his arm to get the teacher's attention.
d. Will you please raise for the National Anthem.
17. a. When the ball team wins the championship.
b. After the school dance is over
c. Even when the car ran out of gas.
d. It was over in just a few minutes.
18. a. He gave the book to the girl that was red.
b. She planted a tree in the yard that was a cherry.
c. They took the old train to Silver Dollar City.
d. The child picked a flower and gave it to his mother that was wilted.

19. a. At the game yesterday, one of the referees has to be replaced when he was run over by the linebacker.
 b. He had sing the solo for a large audience.
 c. The child will be rode the bus when he starts school in the fall.
 d. They were planting seeds for the fall harvest.
20. a. Dr Smith runs a successful clinic.
 b. Mr, and Mrs. Jones have season tickets to the concerts.
 c. “Will you please stop annoying the dog, the mother pleaded.
 d. He will finish the job, however; it may not be until tomorrow.
- 21 a. Howard lives on the corner of Willow Way and Oak Drive.
 b. Michael j. Fox is not related to Redd Foxx.
 c. German and french are two languages taught in my school.
 d. My doctor, dr. Kildare, graduated in 1984 at the top of his class.
22. a. Mikes dog is an Irish Setter named Spike.
 e. I don’t understand the math problem.
 f. Why wasnt the boss notified of the problem right away.
 g. The baby’s rattle fell behind the couch and she cried until she got it back.
23. a. “Oh,” exclaimed the real estate agent, “of course you can see the house again!
 b. He held on so tight to the rope his knuckles turned white.
 c. Cows cant really jump over the moon.
 d. All the girls is wearing formals to the prom.
24. a. Count Leo Tolstoy wrote War and peace.
 b. The flickering candle cast their faint glow on the table.
 c. The barber, asked, “A little off the top?”
 d. Smoking can lead to health problems, yet people still do it.

25. a. Too many mistake in the report.
- b. I can here the birds singing in the trees outside my window.
- c. “How many times will it take him to get it right?” she asked of the repairman.
- d. The dog barked at the cat and then ran around the tree until it was dark and then he slept under it all night.

For Numbers 26 through 30, read the bold sentences. Then choose the sentence that best combines those sentences into one.

26. **The Pushcart Supermarket does not sell my favorite brand of potato chip.**
The grocery store down the street does.
- a. The Pushcart Supermarket does not sell my favorite brand of potato chip, but the grocery store down the street does.
- b. The Pushcart Supermarket does not sell my favorite brand of potato chip; likewise, the grocery store down the street does.
- c. My favorite brand of potato chip is not sold by the Pushcart Supermarket, but the grocery store down the street does sell my favorite brand of potato chip.
- d. The grocery store down the street does, so the Pushcart Supermarket does not sell my favorite brand of potato chip.
27. **The cowboy rode in the barrel races.**
His horse was brown with white stockings.
They fell rounding the third barrel and still finished the race.
- a. Falling rounding the third barrel, the cowboy in the barrel races riding the brown horse with white stockings, still finished the race.
- b. The brown horse fell rounding the barrel and the cowboy still finished the race.
- c. The cowboy rode his brown horse with the white stockings in the barrel races; they fell rounding the third barrel and still finished the race.
- d. The cowboy and his horse in the barrel races fell, he was brown with white stockings, and they still managed to finish the race.

28. **The car needs a new muffler.**
The car is noisy.
- The car is noisy needing a new muffler.
 - The noisy car needs a new muffler.
 - The car that is noisy needs a new muffler.
 - The car is noisy and needs a new muffler.
29. **The fireman drove the hook and ladder truck through the street.**
The fireman sounded the siren.
The fireman was careful.
- The careful fireman drove and sounded the siren of the hook and ladder truck through the streets.
 - The fireman carefully drove the hook and ladder truck through the streets and sounded the siren.
 - Sounding the siren carefully the fireman drove the hook and ladder truck through the street.
 - Through the streets the fireman drove the hook and ladder truck and he sounded the siren too.
30. **It was raining.**
The children were bored.
Their mother helped them bake cookies.
- It was raining; the children were bored, so their mother helped them bake cookies.
 - Being bored while it was raining, the mother helped bake cookies.
 - The bored children baked cookies during the rain with the mother's help.
 - The helping mother baked cookies during the rain with the bored children.

For numbers 31 through 35, read the paragraph. Then choose the sentence that best fills the blank in the paragraph.

31. It was a frightening storm. The rain beat down on the tin roof.
_____ The noise scared the children and they ran to their parents. The dog hid under the bed. The wind howled and the electricity went out. But they were all smiling twenty minutes later when the storm passed and electricity came back on.
- There were puddles in the street.

- b. It sounded like a machine gun.
 - c. The birds were singing sweetly in the trees outside.
 - d. The weatherman had predicted rain.
32. Mr. and Mrs. Sanchez grow things in their garden all year long. In spring they grow flowers. In the summer they grow vegetables. In the fall they grow pumpkins for their grandchildren. _____
_____. “We grow snails all year long, too,” says Mr. Sanchez. But Mrs. Sanchez says that doesn’t count.
- a. In the winter we like to build snowmen.
 - b. Sam lives next door to the Sanchezs and he has a garden also.
 - c. They grow onions in the winter.
 - d. The children carve the pumpkins into jack-o-laterns.
33. In 1930, Henry Okazaki started a new kind of ju-jitsu. Okazaki was a Japanese-American who lived in Hawaii. He was trained in Japanese ju-jitseu But at that time Japanese jitsu was only for Japanese men.
_____. So he opened his own school in Hawaii. In his school he taught ju-jitsu to American men, women, and children. Now many Americans study this martial art.
- a. Okazaki thought ju-jitsu should be for everyone.
 - b. Okazaki was a very good surfer.
 - c. Okazaki was a cousin of Don Ho who was also very good at ju-jitsu.
 - d. Japanese women were taught other forms of self-defense.
34. Every Saturday Mike bakes bread for his family. He works in the kitchen with the radio on. He mixes the bread dough and lets it rise. Then he bakes it. Each week he makes a different kind of bread. Mike likes to bake. _____.
- a. He broke his ankle playing tennis so now he had time to bake.
 - b. His father used to make homemade pasta on Saturdays when he was a boy.
 - c. His children like to help him knead the dough if there are no cartoons on.
 - d. Besides, his family likes his bread better than any bread from the store.

35. _____ . They don't treat the fish as pets, however. They put the fish to work. They keep the fish in the water tanks that their cattle drink from. The goldfish eat bugs and scum. Just two or three of them in a tank can keep the water clear.
- Some catfish are raised on fish farms.
 - Many people have a tank of tropical fish.
 - Some farmers keep goldfish.
 - Mrs. Paul started her company with just a few employees.

For Numbers 36 – 37, choose the answer that best develops the topic sentence.

36. Gertrude Ederle was the first woman to swim the English Channel.
- She was only 19 years old . On August 6, 1926, she set a new world's record. Five men had swum the channel before but she did it 14 hours and 31 minutes. She beat the best men's time by more than two hours.
 - She grew up on a farm outside of Dover, England. She would run to the sea everyday after school to watch the sea birds. Her father taught her to swim when she was ten.
 - The English Channel is found between England and Europe. It is approximately 20 miles across the Channel to Frances. St. George's Channel runs between England and Ireland and the North Channel runs between England and Northern Ireland.
 - Many swimmers have attempt the channel crossing since Miss Ederle. Several have even tried to swim from Cuba to Florida, which is further. To successfully swim greater distances in the ocean, the swimmer is not allowed to be touched or assisted by anyone during the attemp.
37. My neighbor is a used car salesman.
- He is 38, is married and has three kids. He is an big football fan. His favorite team was the Cleveland Browns. He was very upset when the Browns moved from Cleveland. He decided not to get emotionally attached to another team, but you should see him when the Green Bay Packers play.
 - He has a business on the corner of Walnut Lane and Emerson Drive. He sells primarily vintage used cars. Last year he was voted Businessman of the Year by the Chamber of Commerce.

- c. He doesn't like to do yard work. His wife usually mows the lawn and his kids rake the leaves. But he does take good care of his family car. Most weekends you can find him tinkering under the hood in his driveway.
- d. When he was in college he majored in business. He had a summer job working for an uncle on a used car lot. When his uncle died he was left the business.

For Numbers 38 and 39 read the paragraph. Then choose the sentence that does not belong in the paragraph.

38. 1. Some farmers buy broken cookies from bakeries and feed the cookies to their cattle. 2. They mix the cookies with the hay. 3. Dairy cattle give more milk than beef cattle. 4. The cows seem to think the cookies are a treat.
- a. sentence 1
 - b. sentence 2
 - c. sentence 3
 - d. sentence 4
39. 1. When Amy buys clothes, she shops around. 2. She looks for sales and tries to find the best prices. 3. Amy makes her money go farther that way. 4. Amy has seventeen sweaters.
- a. sentence 1
 - b. sentence 2
 - c. sentence 3
 - d. sentence 4

For Numbers 40 –48, read the passage or letter and look at the numbered, underlined parts. Choose the answer that is written correctly for each underlined part.

- (40) On May 18 1980, one of the worst volcanic eruptions in the history of
- (41) the United States took place. Mount st. Helens erupted. The whole top
- (42) of the mountain blew off thousands of trees were blown down. Elk

- (43) bear deer beaver and many other animals were killed. Geologists had
- (44) been monitoring the mountain and had warned people of the danger.
40. a. May 18, 1980;
 b. May 18, 1980,
 c. May 18 1980
 d. Correct as it is
41. a. Mount St. Helens
 b. mount st. helens
 c. Mount st. helens
 d. Correct as it is
42. a. blew off. Thousands
 b. blew off, thousands
 c. blew off. Thousands
 d. Correct as it is
43. a. Elk bear deer beaver,
 and
 b. Elk, bear, deer, beaver
 and
 c. Elk, bear, deer, beaver,
 and
 d. Correct as it is
44. a. mountain, and had
 b. mountain. And had
 c. mountain; and had
 d. Correct as it is

June 15, 1954

(45) Harry Hot Rod Emporium
 Route 66
 Los Angeles, California 59492

Dear Harry,

- (46) I was in you're store last week and bought a set of chrome
- (47) plated dual exhaust pipes for a 1947 refitted Chevy I paid \$24.73 plus tax. It was a great deal. I just wanted to thank you for all your personal service. I look forward to visiting your establishment again.

(48) Truly yours

Eddie the Wheel

45. a. Harrys hot rod Emporium
 b. Harrys Hot rod Emporium
 c. Harry's Hot Rod Emporium
 d. Correct as it is
46. a. youre store
 b. your store
 c. you're Store
 d. Correct as it is
47. a. Chevy, I paid
 b. Chevy. I paid
 c. chevy I paid
 d. Correct as it is
48. a. Truly Yours
 b. Truly Yours,
 c. Truly yours,
 d. Correct as it is

Spelling

For Numbers 1 through 10, choose the word that is spelled correctly and best completes the sentence

1. The private threw the _____ into the enemy's foxhole.
 a. grenade
 b. greanede
 c. greenaide
 d. grenide
2. During the interview, the company president asked Sam to describe his _____ skills.
 a. manergaral
 b. manergial
 c. managerial
 d. managerial
3. The tornado created such a _____ .
 a. calamety
 b. kalamety
4. The printer decided to _____ all the important warnings in the directions.
 a. italicise
 b. italectise
 c. italicize
 d. italecize
5. The athlete said, "Football is not _____ my favorite sport, but I do enjoy the teamwork."
 a. particularly
 b. partiularly

- c. partiquiliar
d. particularly
6. The teacher was proud of the students' _____ achievements.
a. schoolatic
b. scholastic
c. scholastik
d. skolastic
7. There were _____ aromas coming from the kitchen.
a. tandalising
b. tantelizing
c. tantalising
d. tantalizing
8. I like my salad with just a little oil and _____.
a. vinegar
b. vinager
c. vinagar
d. vineger
9. The temperature was a comfortable 75° _____, which was just perfect for the picnic.
a. farenheight
b. fahrenheit
c. fahrinheith
d. farhrenhet
10. The _____ of the octopus grabbed the small fish and pulled it closer.
a. tentacles
b. tentakles
c. tintecles
d. tantackles

Answers to Reading

1. **d.** Because “clear plastic sheets were tacked over the windows to keep the heat in.” Another clue is that the gas stove “warmed” the children at night.
2. **c.** One definition of an icon is a religious figure.
3. **d.** Reread the first sentence of the last paragraph.
4. **a.** Immaculate means very clean.
5. **b.** Choice “a” is incorrect because wooden crates are used to store toys. No mention is made of a bathroom, and one small window does not light a large room.
6. **e.** “Six-legged, brown-bodied pests” describes cockroaches.
7. **a.** Grandpa never worked (toiled), answers b and c suggested he worked, d is a different idea, e is a detail that describes sitting on the porch.
8. **e.** He would let the fence fall down before he would repair it, refers to his laziness, a is unlikely, there is no support for b, c, and d are wrong they indicate the opposite.
9. **e.** This answer is suggested by the information in the first paragraph. A is wrong, there is no evidence Grandpa Tweedy loaned money, there is no evidence that he could support himself so b is wrong, c and d might be right but e is the most likely answer.
10. **b.** Grandpa Tweedy refused permission, a and d are not what he said, c is contradictory and there is no evidence for e.
11. **d.** The rock was thrown by the speaker to stir up the hornets, a refers to the previous paragraph, b and e are misreadings, and c simply gives a reason for the speaker’s actions.
12. **c.** Preventing the suffering of an animal would be a good deed, a and b would not be an excuse but do form the basis of option c, and there is no evidence for d and e.
13. **c.** The message is for (To) Sam Waters.
14. **b.** The message is from Mr. Ralph Richards.
15. **a.** The information that Kyle Kirby is a line manager is not important to the message.
16. **c.** This message was the result of a telephone call, it was not urgent, Mr. Richards did not call for an appointment, nor was he

- returning a call from Mr. Waters.
17. **a.** Apathy is defined as lack of interest or feeling.
18. **b.** A synonym for question is inquiry.
19. **b.** This is supported by the previous lines. Ford here stands for all cars, and the “present animal” is man.
20. **c.** The last five lines of the poem explain what it is like to be without a car.
21. **c.** She is comparing lovers and palm trees. The first half of the poem describes the palms, and the second half the lovers; the last four lines draw the connection.
22. **b.** The wires suggest electricity, and the tension is suggested by nerves.

Answers Mathematics Computation

1. **b,**

$$\begin{array}{r} 53 \\ +6248 \\ \hline 6301 \end{array}$$

2. **a,**

$$\begin{array}{r} 1283 \\ - 621 \\ \hline 662 \end{array}$$

3. **d,**

$$\begin{array}{r} 134 \\ - 89 \\ \hline 45 \end{array}$$

4. **c,**

$$\begin{array}{r} 16 \\ \times 10 \\ \hline 00 \\ +16 \\ \hline 160 \end{array}$$

5. **b,**

$$\begin{array}{r} \underline{25} \\ 84)2100 \\ \underline{-168} \\ 420 \\ \underline{-420} \end{array}$$

6. **a,**

$$\begin{array}{r} 5.5 \\ +3.073 \\ \hline 8.573 \end{array}$$

7. **c,**

$$\begin{array}{r} 7.45 \\ - 0.38 \\ \hline 7.07 \end{array}$$

8. **a,**

$$\begin{array}{r} 950.3 \\ \times 7.4 \\ \hline 38012 \\ +66521 \\ \hline 7032.22 \end{array}$$

Two decimal places in the problem, two decimal places in the answer.

9. d,

$$\begin{array}{r}
 \underline{98.2} \\
 2.58 \overline{)253.356} \\
 \underline{-2322} \\
 2115 \\
 \underline{-2064} \\
 516 \\
 \underline{-516} \\
 0
 \end{array}$$

10. b,

$$\begin{array}{r}
 239.5 \\
 4 \overline{)958.0} \\
 \underline{-8} \\
 15 \\
 \underline{-12} \\
 38 \\
 \underline{-36} \\
 20 \\
 \underline{-20} \\
 0
 \end{array}$$

11. d,

$$\begin{array}{r}
 \underline{130} \\
 3.8 \overline{)494.0} \\
 \underline{-38} \\
 114 \\
 \underline{-114} \\
 00 \\
 \underline{-0} \\
 0
 \end{array}$$

12. a,

$$\begin{array}{r}
 \underline{3} \\
 8 \\
 \underline{2} \\
 + 8 \\
 \underline{5} \\
 8
 \end{array}$$

13. c,

$$\begin{array}{r}
 4 \underline{1} \\
 7 \\
 \underline{3} \\
 + 7 \\
 \underline{44} \\
 7
 \end{array}$$

14. b,

$$\frac{5}{8} \times \frac{2}{6} = \frac{5 \times 2}{8 \times 6} = \frac{10}{48} = \frac{5}{24}$$

$$\text{or } \frac{5}{8} \times \frac{2}{6} = \frac{5 \times 1}{4 \times 6} = \frac{5}{24}$$

15. b,

$$\begin{array}{r}
 \underline{9} \\
 13 \\
 \underline{5} \\
 -13 \\
 \underline{4} \\
 13
 \end{array}$$

16. d,

$$\begin{array}{r}
 3 \underline{1} = 3 \underline{3} \\
 2 \quad 6 \\
 2 \underline{2} = 2 \underline{2} \\
 + 6 \quad 6 \\
 \hline
 5 \underline{5} \\
 6
 \end{array}$$

17. b,

$$\begin{array}{r}
 5 \underline{1} = 5 \underline{4} = 4 \underline{16} \\
 3 \quad 12 \quad 12 \\
 \underline{3} = \underline{9} = \underline{9} \\
 -4 \quad 12 \quad 12 \\
 \hline
 4 \underline{7} \\
 12
 \end{array}$$

18. c,

$$1 \frac{1}{2} \times \frac{3}{7} = \frac{3}{2} \times \frac{3}{7} = \frac{9}{14}$$

19. b,

$$\frac{7}{8} \div \frac{1}{4} = \frac{7}{8} \times \frac{4}{1} = \frac{28}{8} = 3 \frac{4}{8} = 3 \frac{1}{2}$$

$$\text{or } \frac{7}{8} \div \frac{1}{4} = \frac{7}{8} \times \frac{4}{1} = \frac{7}{2} = 3 \frac{1}{2}$$

20. **d,**
 $6\frac{2}{3} \div 2\frac{4}{6} = \frac{20}{3} \div \frac{16}{6} = \frac{20}{3} \times \frac{6}{16} =$

$$\frac{120}{48} = \frac{10}{4} = 2\frac{1}{2}$$

or $\cancel{20}^5 \times \cancel{6}^2 = \frac{10}{4} = 2\frac{1}{2}$
 $\cancel{3}^1 \quad \cancel{16}^4$

21. **b,**
 10% of 16 =
 change 10% to decimal and
 multiply by 16

$$\begin{array}{r} 16 \\ \times .10 \\ \hline 1.60 \text{ or } 1.6 \end{array}$$

21. **b,**
 70% of 32 =
 70% to .70 and multiply

$$\begin{array}{r} 32 \\ \times .70 \\ \hline 21.40 \text{ or } 22.4 \end{array}$$

22. **a,**
 $20 - (-3) =$
 $-(-) = +$
 $20 + 3 = 23$

24. **c,**
 $-6 + 5 + 8 = -6 + 13 = 7$
 or $13 - 6 = 7$

25. **d,**
 $\square\%$ of 50 = 40

$$\begin{array}{r} .8 \\ 50 \overline{)40.0} \\ \underline{-400} \\ 0 \end{array} \text{ then } .8 \times 100\% = 80\%$$

26. **b,**
 6% of $\square = 36$
 6% to .06 then divide

$$\begin{array}{r} 600 \\ .06 \overline{)36.00} \\ \underline{36} \\ 00 \end{array}$$

27. **a,**
 $6x + x = 7x$
 or

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

28. **b,**
 $7ab - 2ab = 5ab$
 or

$$\begin{array}{r} 7ab \\ \underline{-2ab} \\ 5ab \end{array}$$

29. **c,**
 $3^3 \times 3^2 = 3^{3+2} = 3^5$

30. **b,**
 $100 \times (-4) = -400$
 $(-)\times(+)=(-)$
 $(-)\times(-)=(+)$

or

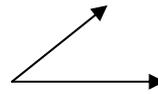
$$\begin{array}{r} 100 \\ \times -4 \\ \hline -400 \end{array}$$

Following is a list of formulas, definitions, and hints that you should be familiar with for the T.A.B.E. Test.

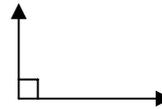
- Sum, the answer to an addition problem
- Product, the answer to a multiplication problem
- Difference, the answer to a subtraction problem
- Quotient, the answer to a division problem
- Perimeter, the distance around a polygon, the sum of the sides
- Area, length multiplied by the width, $L \times W = A$
- Volume, length multiplied by the width multiplied by the height, $L \times W \times H = V$
- Factor, a number that divides into another number without a remainder, 2 is a factor of 4, 6, 12
- Multiple, a number that is the product of two numbers, 12 is a multiple of 6, 3, 4, and 2
- Diameter of a circle, the distance from one side to the other through the center of the circle
- Radius of a circle, the distance from the center to the outer edge of the circle
- Area of a triangle, base multiplied by height and divided by 2, $\frac{1}{2}bh$
- Circumference, the distance around the outside of a circle, $C = \pi d$ or $C = \pi 2r$, where d is diameter, r is radius, $\pi = 3.14$

- Area of a circle is πr^2
- To find a percent of a number change the percent to a decimal and multiply it by the number
- To find the average of a group of numbers, add the numbers together and divide the total by the number of numbers in the group

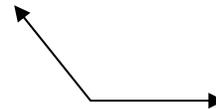
- Acute angle is less than 90°

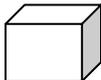


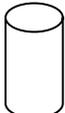
- Right angle is 90°



- Obtuse angle is more than 90°

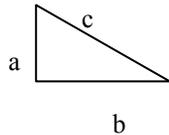


-  cube

-  cylinder

- Parallelogram, 4 sided figure whose opposite sides are parallel
- Square, figure with 4 equal sides
- Rectangle parallelogram with four right angles
- pentagon has 5 sides
- hexagon has 6 sides
- octagon has 8 sides
- triangle has 3 sides
- right triangle has 1 right angle and 2 acute angles

- acute triangle has three acute angles
- obtuse triangle has one obtuse angle and two acute angles
- equilateral triangle has three equal sides
- Isosceles triangle has two equal sides
- Scalene triangle has three unequal sides
- For a right triangle $a^2 + b^2 = c^2$



- Fractions must have the same denominator to be added or subtracted
numerator/denominator
- Parallel lines never cross (never will)
- Perpendicular lines cross at right angles
- $<$ is the symbol for less than, $2 < 3$
- $>$ is the symbol for greater than, $3 > 2$
- 12 inches in a foot
- 3 feet in a yard
- 10 milli(meters, grams, liters) in a centi(meter, gram, liter)
- 10 centi(meters, grams, liters) in a meter, gram, liter
- 1000 meters, grams, liters, in a kilo(meter, gram, liter)
- 60 seconds in a minute
- 60 minutes in an hour
- 24 hours in a day
- 16 ounces in a pound
- 8 ounces in a cup
- 2 pints in a quart
- 4 quarts in a gallon

Answers to Applied Mathematics

- b,**

$$\begin{array}{r} 306 \\ \times 15 \\ \hline 1530 \\ + 306 \\ \hline 4590 \end{array}$$
- b,**
12, 536, 2 is in the thousands place, if the number to the right is 5 or more the place is rounded up one if the number is 4 or less the place remains the same.
- c,** 5,000 (thousand)
- a,**

$$\begin{array}{r} 135 \\ + 86 \\ \hline 221 \end{array}$$
- d,**

$$\begin{array}{r} \underline{5} \\ 50)270 \\ -250 \\ \hline 20 \end{array}$$

5 full busses and 1 for the 20 students remaining = 6
- c,**
- a,**

$$\begin{array}{r} 0 \ 10 \ 5 \ 1 \\ \cancel{1} \cancel{2} \cancel{6} \cancel{8} \\ - 1319 \\ \hline 9949 \end{array}$$

8. **c,**

$$\begin{array}{r} \underline{608} \\ 3)1824 \\ \underline{-18} \\ 02 \\ - \underline{0} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

9. **b,**

$$\begin{array}{r} 18 \\ - \underline{8} \\ 10 \\ + \underline{10} \\ 20 \\ - \underline{6} \\ 14 \end{array}$$

10. **a,**

$$\begin{array}{l} \underline{3} \times 3 = \underline{9} \quad \text{or} \quad \underline{9} \div 3 = \underline{3} \\ 4 \times 3 = 12 \quad 12 \div 3 = 4 \end{array}$$

11. **c,**

$$\begin{array}{r} \underline{1} = \underline{6} \\ 2 \quad 12 \\ \underline{3} = \underline{9} \\ 4 \quad 12 \\ \underline{1} = \underline{4} \\ + 3 \quad 12 \\ \hline \underline{19} = 1 \underline{7} \\ 12 \quad 12 \end{array}$$

12. **a,**

$$\begin{array}{r} \underline{5} = \underline{5} \\ 6 \quad 6 \\ \underline{2} = \underline{4} \\ - 3 \quad 6 \\ \hline \underline{1} \\ 6 \end{array}$$

13. **c,** units are increasing by 3 each time, 312, 315, 318, 321, 324

14. **c,** 3.02, 3.45, 4.05, 4.54, 23.0

15. **a,** 3.456 is less than 3.82

16. **c,**

$$\begin{array}{r} \$34.50 \\ \times \underline{.15} \\ 17250 \\ +3450 \\ \hline 5.175 \text{ round to the} \\ \text{nearest penny} = 5.18 \text{ and} \\ \text{add to } \$34.50 \text{ for a total of} \\ \$39.68 \end{array}$$

17. **d,** 25

$$\begin{array}{r} \underline{x.20} \\ 5.00 \end{array}$$

18. **b,** \$ 450 then divide 40

$$\begin{array}{r} - \$50 \\ \hline \$400 \end{array}$$
 payments into
 \$400 remaining total

$$\begin{array}{r} 10 \\ 40)\$400 \\ \underline{-400} \\ 0 \end{array}$$

19. **c,** $\frac{5 \text{ miles}}{2 \text{ hours}} = \frac{x}{7 \text{ hours}}$

cross multiply, $5(7) = 2(x)$

$$\begin{array}{l} 35 = 2x \\ \underline{35} = \underline{2x} \\ 2 \quad \diagdown \\ 7 \frac{1}{2} = x \end{array}$$

20. **b,** $\frac{1}{10} = \frac{1.5}{x}$ cross multiply

$$\begin{array}{l} 10(1.5) = 1(x) \\ 15.0 = x \end{array}$$

21. **c**,

$$9.32 \cancel{\text{cm}} \times \frac{10 \text{ mm}}{1 \cancel{\text{cm}}} = 93.2 \text{ mm}$$

22. **d**, 16% Management

$$\begin{array}{r} +15\% \text{ Shoes} \\ \hline 31\% \end{array}$$

23. **c**, 10% Hardware

$$\begin{array}{r} +10\% \text{ Stockroom} \\ \hline 20\% \end{array}$$

20% to .20,
 $200 \text{ people} \times .20 = 40 \text{ people}$

24. **a**, 25% to .25
 $200 \text{ people} \times .25 = 50 \text{ people}$
 or

$$\begin{array}{r} \underline{\quad 25 \quad} \\ 200) 50.00 \text{ people} \\ \underline{-400} \\ 1000 \quad .25 \times 100\% = 25\% \\ \underline{-1000} \\ 0 \end{array}$$

25. **b**,
$$\begin{array}{r} 75 \quad \underline{86} \\ 84 \quad 6)516 \\ 92 \quad \underline{-48} \\ 89 \quad 36 \\ 96 \quad \underline{-36} \\ \underline{+80} \quad 0 \\ 516 \end{array}$$

26. **b**, change 15% to .15

$$\begin{array}{r} \$750 \text{ then, } \$750 \\ \underline{\times .15} \quad \underline{- \$112.50} \\ 3750 \quad \underline{\$637.50} \\ \underline{+750} \\ \$112.50 \end{array}$$

27. **c**, the entry is $\frac{1}{4}$ of a circle
 The formula of the area of a circle is $\text{Area} = \pi r^2$, π is 3.14
 So entry area = $3.14(5)^2 \times \frac{1}{4}$

$$\begin{array}{l} 3.14(25) = 78.5 \\ 78.5 \times \frac{1}{4} = 19.625 \end{array}$$

28. **a**, the formula for area is length x width, the bathroom is 8ft x 5 ft.
 $8 \times 5 = 40 \text{ ft.}^2$

$$\begin{array}{r} \$2.25 \\ \underline{\times 40} \\ \$90.00 \end{array}$$

29. **d**,

regular price	sale price
\$12.50	\$ 9.50
$\underline{\times 325}$	$\underline{\times 325}$
6250	4750
2500	1900
$\underline{+3750}$	$\underline{+2850}$
\$4062.50	\$3087.50

$$\begin{array}{r} \$4062.50 \\ - \underline{\$3087.50} \\ \$ 975.00 \end{array}$$

30. **d**,
$$\begin{array}{r} \$525 \\ \underline{-\$450} \\ \$ 75 \end{array}$$

 $\$75 \times 6 \text{ apartments} = \450

31. **b**, in July AAA sold 50 + Harry's sold 100 = 150 washing machines

32. **b**, in July Harry's sold 100 washing machines and AAA sold 50, 100 is twice as many as 50.

33. **c**,

34. **a**,

35. **d**,

36. **b**, 10,325 rounds to 10,000 and 9,672 rounds to 10,000.
 $10,000 + 10,000 = 20,000$

37. **a**, $8x - 5 = 27$

$$\begin{array}{r} 8x - 5 = 27 \\ +5 \quad +5 \\ \hline 8x = 32 \\ \frac{8x}{8} = \frac{32}{8} \\ x = 4 \end{array}$$

38. **c**, $8m - 6 = 46$

$$\begin{array}{r} 8m - 6 = 46 \\ -6 \quad -6 \\ \hline 8m = 40 \\ \frac{8m}{8} = \frac{40}{8} \\ m = 5 \end{array}$$

39. **a**, $4n - 3$ less than 1

$$\begin{array}{r} 4n - 3 < 1 \\ +3 \quad +3 \\ \hline 4n < 4 \\ \frac{4n}{4} < \frac{4}{4} \\ n < 1, \text{ the only choice} \\ \text{that is less than 1 given is 0} \end{array}$$

40. **b**, $\frac{29}{7} = 4 \frac{1}{7}$

$$\begin{array}{r} \frac{29}{7} \\ 7 \overline{)29} = 4 \frac{1}{7} \\ -28 \\ \hline 1 \end{array}$$

41. **c**, $\frac{15}{25} = \frac{.6}{25)15.0}$

$$\begin{array}{r} \frac{15}{25} \\ 25 \overline{)15.0} \\ -150 \\ \hline \end{array}$$

42. **d**, 125

$$\begin{array}{r} - \frac{74}{51} \quad \text{3 remaining sides} \\ \quad \quad \text{divided in 51 ft.} \\ \frac{17}{3)51} \\ -3 \\ \hline 21 \\ -21 \\ \hline 0 \end{array}$$

43. **d**, $\frac{1}{2} + \frac{1}{4} = \frac{2}{4} + \frac{1}{4} = \frac{3}{4}$
 $\frac{3}{4} \times 3 = \frac{3}{4} \times \frac{3}{1} = \frac{9}{4}$ or $2 \frac{1}{4}$

44. **b**, 6 is $\frac{1}{2}$ of a batch

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

45. **d**, double = $\times 2$
 1 cup milk + $\frac{1}{2}$ cup butter = $1 \frac{1}{2}$
 $1 \frac{1}{2} \times 2 = \frac{3}{2} \times \frac{2}{1} = \frac{6}{2} = 3$

46. **a**, 3 is $\frac{1}{4}$ of a dozen

$$\frac{2}{1} \times \frac{1}{4} = \frac{2}{4}$$

reduces to $\frac{1}{2}$

47. **b**, 69

$$\begin{array}{r} +57 \\ 126 \text{ miles} \end{array}$$

48. **d**, 1:23

$$\begin{array}{r} +:50 \\ 1:73 \quad \text{60 minutes in an} \\ \text{hour, 73 minutes is} \\ 1:13 + 1:00 = 2:13 \end{array}$$

49. **c**, 1:10 and 1:05

$$\begin{array}{r} +:45 \\ 1:55 \end{array} \quad \begin{array}{r} +:50 \\ 1:55 \end{array} \text{ same}$$

50. **c**, $84 + 42 = 126$

$$\begin{array}{r} 180 \\ - 126 \\ \hline 54 \end{array}$$

51. **b**,

52. **c**,

53. **a**,

54. **d**,

LANGUAGE ANSWERS

1. **a (,)** Comas are used to separate items in a list; washed, vacuumed, and polished
2. **b(!)** An exclamation mark is used to express strong feelings, such as surprise, shock, or enthusiasm.
3. **a(,)** A comma is used to separate 2 parts of a sentence when each part is a complete idea. Hint: Look for connectives: and, but, so, yet, or, nor, for (meaning because).
4. **c(?)** Quotations set off someone's exact words, and are always used in pairs.
5. **d(none)** See explanation for #3 above.
6. **b(")** See explanation for #4 above.
7. **c(?)** A Question mark is used at the end of a direct question. Punctuation is

always placed inside the quotation marks.

. . . "would phone at this hour?"

8. **a(,)** Nouns or names used as terms of direct address, interjections, and the words yes and no should be set off by comas. EX. How was the test, Mary. Oh, yes, that is on sale.
9. **c – will be –** A future tense verb is needed. Clue: tomorrow
10. **a – is –** A singular verb is needed. Clue: someone and his, the sentence is about one person.
11. **c – did –** A past tense of the verb do is needed. Clue: last night.
12. **b – faster –** When comparing two things words ending with er are usually used, when comparing three or more, words ending with est are used.
13. **d – herself -** Sally's action (of being proud) is reflected back onto Sally.
14. **c – students' –** Apostrophe + s shows possession. If the noun is singular and apostrophe then s. If the noun is plural and already has an s on the end add apostrophe only. Ex. Singular cat, cat's toy Plural cats, cats' toys
15. **b – quickly –** An adverb is a word that describes an

- action verb, adjective or another adverb. Adverbs answer when, where, how, or to what extent. They usually end in ly.
16. **c** – Raise – Rise and Raise are confusing words. Rise is what one does to themselves. I will rise to the occasion (intransitive). Raise is what you do to someone or something else. I will raise the window(transitive).
17. **d** – All other choices are sentence fragments, not complete thoughts.
18. **c** – In all other choices it is unclear which nouns are being modified. Ex. A. Is the book or the girl red?
19. **d** – All other choices have the wrong verb tense.
20. **d** – All other Choices have incorrect punctuation.
21. **a** – All other choices have capitalization errors.
22. **b** – All other choices have had the apostrophe left out.
23. **b** – a & c have punctuation errors. d has a plural noun and a singular verb.
24. **d** – a has a capitalization error. b has a singular noun and a plural pronoun antecedent. c has a comma used incorrectly.
25. **c** – a is a sentence fragment. In b the word here is used incorrectly, it should be

hear. And d is a run-on sentence.

For Numbers 26 through 30 the best choice is asked for. More than one choice may combine the sentences. Hint: 1) look for all the facts, 2) the meaning should be clear, 3) the sentence shouldn't be repetitive.

26. **a**,
 27. **c**,
 28. **b**,
 29. **b**,
 30. **a**,

For Numbers 31 though 35 the best choice is asked for. More than one choice may seem to make some sense. But the choice should fit the meaning and mood of the entire paragraph.

31. **b**,
 32. **c**,
 33. **a**,
 34. **d**,
 35. **c**,
36. **a**, This paragraph best describes the woman and her accomplishment.
37. **b**, This paragraph best describes an honest used car salesman.
38. **c**, This sentence has nothing to do with feeding cows cookies.
39. **d**, This sentence has nothing to do with Amy's shopping habits.

40. **b**, Dates are correctly written in text as Month day coma year coma and then the rest of the text. A period would follow the year if the date comes at the end of a sentence.
41. **a**, The proper name of a person or place should always be capitalized.
42. **a**, These are two complete, different thoughts and should be separated by a period.
43. **c**, A comma follows all but the last in a list of items.
44. **d**, This sentence is correct as it is.
45. **c**, Apostrophe s shows possession. The Hot Rod Emporium is owned by Harry.
46. **b**, Your, the possessive pronoun, should be used here.
47. **b**, These are two complete, different thoughts and should be separated by a period.
48. **c**, In the closing of a letter the first word is capitalized and the last word is followed by a comma.

Spelling Answers

1. **a**,
2. **d**,
3. **c**,
4. **c**,
5. **a**,
6. **b**,
7. **d**,
8. **a**,
9. **b**,
10. **a**.