

## AMI Assignment- Day 5

### Answer Sheet:

(This sheet should be turned in as a record of your attendance.)

Write in the letter for your answer to each question.

English	Math	Reading	Science
1.	16.	24.	34.
2.	17.	25.	35.
3.	18.	26.	36.
4.	19.	27.	37.
5.	20.	28.	38.
6.	21.	29.	
7.	22.	30.	
8.	23.	31.	
9.		32.	
10.		33.	
11.			
12.			
13.			
14.			
15.			

## English

## Mini-Test 5

## PASSAGE V

Attempts: \_\_\_\_\_ Correct: \_\_\_\_\_

## German Brother

[1]

When I was a freshman, there were two foreign exchange students attending our high school. My school was very small, and all of the students had known each other since the first grade, so having two new students from a different country was intriguing.

[2]

Both of the foreign exchange students were boys.

One, named Zuka, was from Georgia, and the other, named

63

Bjorn, he was from Germany. [65]

64

[3]

Halfway through his year at my high school, Bjorn came to live with my family because he did not get along with his first host family.

66

1. A. NO CHANGE  
B. was  
C. is  
D. be
2. Which of the following alternatives to the underlined portion would NOT be acceptable?  
F. NO CHANGE  
G. grade. To have  
H. grade. So to have  
J. grade. Having
3. A. NO CHANGE  
B. One named Zuka  
C. One was named Zuka,  
D. One, were named Zuka,
4. F. NO CHANGE  
G. was  
H. is  
J. he is
5. The writer is considering adding a sentence to the preceding paragraph in order to provide more information about the exchange students. Which of the following sentences best accomplishes this goal?  
A. Both boys were seniors in high school.  
B. At the time, Germany had stricter laws than Georgia.  
C. Some people thought that Georgia was the state in the U.S. rather than the country.  
D. I had always wanted to learn German.
6. F. NO CHANGE  
G. school; Bjorn  
H. school. Bjorn  
J. school, Bjorn,

GO ON TO THE NEXT PAGE

It was<sup>67</sup> not a good fit for Bjorn. Over the rest of the year, Bjorn became like a brother to me.

[4]

At first, he was very quiet and shy in his new home, but eventually he opened up to my family and fit in perfect.<sup>68</sup> Since Bjorn was the same age as my older brother, he was able to relate to him easily, and they became close friends.

He told us all about Germany and<sup>69</sup> we helped him break down the language barrier. The single most important German phrase that he taught us was

"Ich liebe dich", which<sup>70</sup> is German for *I love you*.

[5]

Bjorn had left<sup>71</sup> at the end of the summer after graduating from our high school. He has yet to return

to the United States, but he keeps in contact with my family<sup>72</sup> and I over the Internet.

[6]

One day when<sup>73</sup> I travel to Germany, he will be my host and help me navigate the new culture, just as we

7. A. NO CHANGE  
B. The first family was  
C. They was  
D. It were

8. F. NO CHANGE  
G. in perfect!  
H. in more perfect.  
J. in perfectly.

9. A. NO CHANGE  
B. Germany. And  
C. Germany; and  
D. Germany, and

10. F. NO CHANGE  
G. "Ich liebe dich," which  
H. "Ich liebe dich" which  
J. Ich liebe dich, which

11. A. NO CHANGE  
B. left  
C. had gone  
D. leaving

12. F. NO CHANGE  
G. my family, and I,  
H. us, my family  
J. my family and me

13. A. NO CHANGE  
B. One day, when,  
C. One day, when  
D. One day when,

did for him. He will forever be in my heart and a part of my  
family. <sup>74</sup> [75]

14. F. NO CHANGE  
G. had did  
H. done  
J. were doing
15. Which of the following details could the writer add to the last paragraph of the passage in order to improve the development of her conclusion?
- A. Mention what happened to Zuka.
  - B. Give details about when the writer expects to visit Germany.
  - C. Explain the differences between the cultures of the United States and Germany.
  - D. Discuss the language barrier the writer might face in Germany.

**END OF MINI-TEST FIVE**  
**STOP! DO NOT GO ON TO THE NEXT PAGE**  
**UNTIL TOLD TO DO SO.**



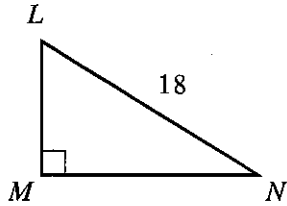
## Math

## Mini Test 5

Attempts: \_\_\_\_\_ Correct: \_\_\_\_\_

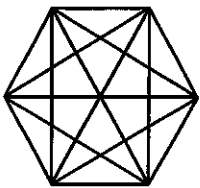
DO YOUR FIGURING HERE.

16. The hypotenuse of the right triangle  $\triangle LMN$  shown below is 18 feet long. The sine of angle  $L$  is  $\frac{5}{6}$ . About how many feet long is line segment  $\overline{MN}$ ?

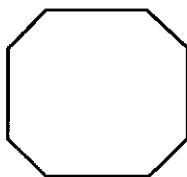


- A. 11  
 B. 12  
 C. 15  
 D. 18  
 E. Cannot be determined from the given information
17. If  $x = 3t - 8$  and  $y = 4 + t$ , which of the following equations expresses  $y$  in terms of  $x$ ?
- F.  $y = 4x - 4$   
 G.  $y = \frac{x - 20}{3}$   
 H.  $y = \frac{x + 3}{20}$   
 J.  $y = \frac{x}{3 - 4}$   
 K.  $y = \frac{x + 20}{3}$
18. Hexagons have 9 diagonals, as illustrated below. How many diagonals do octagons have?

Hexagon



Octagon



- A. 8  
 B. 16  
 C. 20  
 D. 32  
 E. 40

GO ON TO THE NEXT PAGE



19. Jennifer wants to draw a circle graph showing the favorite candies of her friends. When she polled her friends, asking each his or her favorite candy, 30% of her friends said chocolate, 25% of her friends said peppermint, 15% of her friends said licorice, 15% of her friends said gum, and the remaining friends said some other type of candy. If she groups the other candies chosen by the remaining friends in the same sector, what will the degree measure of this sector be?

F.  $12^\circ$   
 G.  $24^\circ$   
 H.  $26^\circ$   
 J.  $48^\circ$   
 K.  $54^\circ$

DO YOUR FIGURING HERE.

20. The number of students participating in afterschool programs at a certain high school can be shown by the following matrix.

Quizbowl	Band	Chorus	Debate
[ 30	60	40	30 ]

The principal estimates the ratio of the number of program awards that will be earned to the number of students participating with the following matrix.

[ Quizbowl : 0.2
Band : 0.3
Chorus : 0.5
Debate : 0.4 ]

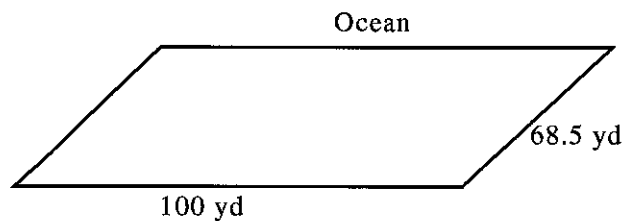
Given this data, what is the principal's estimate of the number of programs awards that will be earned for these afterschool programs?

A. 60  
 B. 56  
 C. 52  
 D. 48  
 E. 36

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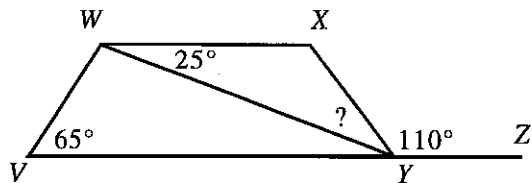
21. After a hurricane, coastal workers removed an estimated 8,000 cubic yards of sand from the downtown area. If this sand was spread in an even layer over a rectangular segment of beach, as shown below, about how many yards deep would the new layer of sand be?



DO YOUR FIGURING HERE.

- F. Less than 1  
 G. Between 1 and 2  
 H. Between 2 and 3  
 J. Between 3 and 4  
 K. More than 4
22. What is the distance in the standard  $(x,y)$  coordinate plane between points  $(1,2)$  and  $(4,6)$ ?
- A. 4  
 B. 5  
 C. 7  
 D. 10  
 E. 13

23. In the figure below,  $VWXY$  is a trapezoid,  $Z$  lies on line  $\overline{VY}$ , and angle measures are as marked. What is the measure of  $\angle WYX$ ?



- F.  $25^\circ$   
 G.  $30^\circ$   
 H.  $45^\circ$   
 J.  $55^\circ$   
 K.  $65^\circ$

GO ON TO THE NEXT PAGE

## READING TEST



## Passage I

**PROSE FICTION:** This passage is adapted from the title story of *Only the Little Bone*, a collection of short stories by David Huddle (©1986 by David Huddle).

My grandfather has made crutches for me. These are sturdy crutches, just the right size. I am delighted with them and launch myself around the house on them.

And take a fall immediately. And continue falling several times a day, great splatting, knocking-into-furniture-and-breaking-things falls that cause everyone in the family to come running. My grandfather has forgotten to put rubber tips on the ends of my crutches. When we figure this out and buy the rubber tips and put them on the crutches, I stop falling. But by then the bone-set that was coming along nicely has slipped, and the doctor has ordered me back to the wheelchair.

The missing crutch-tips are the first clue I have to this peculiar family trait, one that for lack of any better term I must call "flawed competence." We Bryants are a family of able and clever people, industrious, intelligent, determined, and of good will. We are careful in our work. After all, my grandfather measured me on two occasions before he made the crutches. But we usually do something wrong.

Four years later I become increasingly aware of "flawed competence" when I develop a plan for converting our old grown-over tennis court into a basketball court. My grandfather is always interested in plans, and in this planning session, we decide that he will make the hoops, and he will help me make the backboards. Clearing the ground and smoothing the surface will be my tasks. So I rip out honeysuckle and hatchet down a few little scrub cedars. We Bryants are known for setting our minds to things.

Then my grandfather delivers the hoops. They are beautifully designed and constructed, metalwork of a high order for such amateurs as my grandfather and his men. But the hoops are twice as big around as ordinary basketball hoops.

I say, simply, that they are too big. I am not ungrateful, not trying to be hateful, not in my opinion being overly fastidious. I am simply describing a char-

acteristic of the hoops. But my grandfather's feelings are damaged. No, they can't be made smaller, and no, he's not interested in helping me with the backboards now or with any other part of my plan. He's sorry he got involved in the first place. This, too, is a corollary of "flawed competence." We are sensitive, especially about our work, especially about the flawed part of our work.

At the place where I work twenty-eight years after the basketball hoops, I am given a new office, one with a view of the lake. There's a string attached, though, and that is that I have to build my own bookcases. I commence planning with enthusiasm. That's another, less harmful family trait, that attraction to making plans. I measure, I look at other people's shelves, I get someone to help me attach brackets to my office walls.

It is while I am cutting a notch in one of the uprights to allow access to the light-switch that I suddenly think of my grandfather and those basketball hoops. I feel a light sweat break out on my forehead. A pattern of genetic fate reveals itself to me: I'm going to mess up these bookshelves just as my grandfather before me would have messed them up. No doubt I'm sawing the notch in the wrong place.

The whole time I work I wait to see where the screw-up is going to come. I imagine what my colleagues will be saying about me in the hallways. Did you know that Bryant built his shelves so they tilt? Did you know that Bryant's books rejected the color he painted his shelves? But the screw-up doesn't appear. I paint the shelves red, and they look O.K. (Granddaddy Bryant once painted yellow a whole row of company houses he built.) I paint a chair blue and red, and it's a little silly-looking, but it picks up the blue of the carpet and the red of the shelves. The vision isn't nearly as impressive as I thought it would be, but then what vision ever is? We plan-makers are accustomed to things turning out not-quite-as-good-as-we-had-in-mind. Our world view includes the "diminished excellence" component. Diminished excellence is a condition of the world and therefore never an occasion for sorrow, whereas flawed competence comes out of character and therefore is frequently the reason for the bowed head, the furrowed brow. Three months later, when I try to turn the heat off in my office, I discover that I have placed one of the shelf uprights too close to



85 the radiator to be able to work the valve. The screw-up was there all along, but in this case I am relieved to find it. I am my grandfather's grandson after all.

24. The passage is written from the point of view of:
- A. an unidentified narrator observing the relationship over time between a boy and his grandfather.
  - B. two members of the same family discovering their shared trait through joint activities.
  - C. a grown man agonizing over the mixed messages he received as a child from older relatives.
  - D. a boy and the man he becomes considering incidents that illustrate a family trait.
25. Which of the following best describes the author's approach to presenting the story of the narrator's discovery about himself?
- F. Revealing the narrator's self-awareness about a trait through a blend of personal reflection and scenes from the narrator's youth and adulthood
  - G. Starting immediately with a statement of the discovery in the narrator's voice and continuing with scenes that reveal how the discovery came about
  - H. Describing the physical details of scenes and summarizing their significance in a concluding statement in the narrator's voice
  - J. Using dialogue in the midst of scenes fraught with tension to indicate what the narrator is experiencing internally
26. Each of the three projects described in the passage reveals:
- A. the increasing antagonism between the grandfather and grandson.
  - B. the errors the narrator makes and the disapproval they bring from others.
  - C. that such incidents set the stage for the Bryant family traits to emerge.
  - D. that the narrator is determined to avoid being ungrateful, hateful, or overly fastidious.
27. The boy's approach to the task of converting the tennis court to a basketball court can best be described as:
- F. reluctant until his grandfather's plans inspire him.
  - G. enthusiastic until his grandfather's error puts them both in an awkward position.
  - H. apprehensive until he discovers his error is not a devastating one.
  - J. thrilled until he remembers that his grandfather is a poor planner.
28. As he is revealed in the incident of undertaking the construction of the basketball court, the grandfather can best be characterized as:
- A. confidently optimistic, then childishly defensive.
  - B. charmingly patient, then increasingly accusatory.
  - C. consistently encouraging in spite of setbacks.
  - D. vocally defensive, then quietly apologetic.
29. The question "Did you know that Bryant built his shelves so they tilt?" (lines 65–66) helps establish that the narrator is anxious because:
- F. his coworkers have discovered his incompetence and have made it the subject of office humor.
  - G. his coworkers resent his having a corner office and punish him with their biting humor.
  - H. he fears his incompetence is so glaring it will make him the object of ridicule among coworkers.
  - J. the tilting bookshelves remind him that, like his grandfather, he cannot hide his mistakes.
30. Information in the second paragraph (lines 4–12) reveals that the family's response to the grandfather's error with the crutches is to:
- A. find a workable remedy for it.
  - B. lay the blame on the narrator.
  - C. praise him for more successful projects.
  - D. fix what wasn't wrong in the first place.
31. It can most reasonably be inferred from the sixth paragraph (lines 36–46) that the statement that the basketball hoops "can't be made smaller" (line 40) is:
- F. a fact stated by the grandfather apologetically.
  - G. an opinion stated by the grandfather indignantly.
  - H. a claim the narrator makes to humiliate a relative.
  - J. a conclusion the narrator reaches after hard labor.
32. It can most reasonably be inferred that the narrator's discovery that an error has been made in constructing the bookshelves is for him a source of:
- A. embarrassment in the face of coworkers who anticipated it.
  - B. comfort because it reveals a trait that he shares with his family.
  - C. frustration because it will require a remedy that will be tedious to carry out.
  - D. relief because it gives him an excuse to seek the assistance of coworkers in finishing the project.
33. In the last paragraph, a comparison is made between "diminished excellence" and "flawed competence." From the narrator's point of view, the conditions are different because the one is:
- F. a source of sorrow while the other is a source of pride.
  - G. based in the family while the other is based in the self.
  - H. inherent in the environment while the other is inherent in the individual.
  - J. a sign that the individual can improve the world while the other is a sign that the individual can't.



## Science

## Mini-Test 5

## Passage V

Attempts: \_\_\_\_\_ Correct: \_\_\_\_\_

A particular area's soil horizons can be broken down into three distinct layers: permeable topsoil, highly plastic clay, and limestone bedrock. A company engineer is attempting to collect calcium carbonate,  $\text{CaCO}_3$ , from the area in order to produce a range of industrial materials. He projects calcium carbonate to be present in varying levels throughout the various soil horizons, as shown below in Table 1. In order to ensure stable mining conditions, he additionally collects information on the average water capacity of the various soil horizons, as shown in Table 2.

Table 1	
Soil texture	% $\text{CaCO}_3$
permeable topsoil	5%
highly plastic clay	32%
limestone bedrock	88%

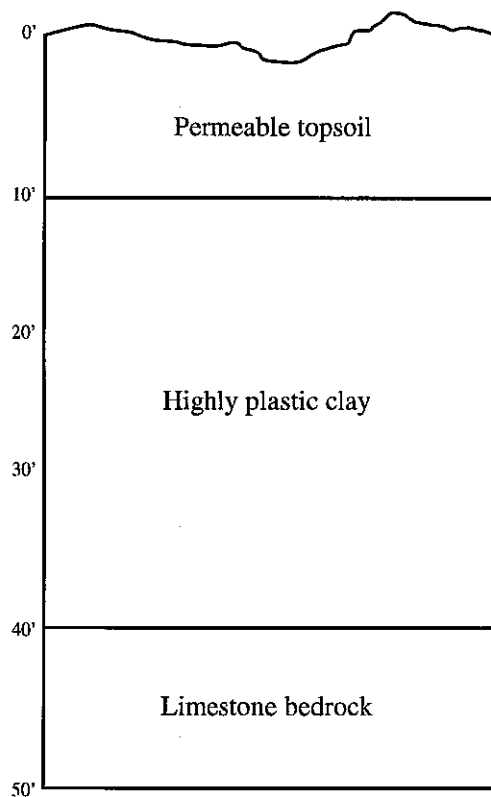


Figure 1

Table 2	
Soil texture	Water capacity ( $\text{in}^3/\text{ft}^3$ )
permeable topsoil	0.9
highly plastic clay	1.4
limestone bedrock	0.3

GO ON TO THE NEXT PAGE



34. Highly plastic clay causes significant problems for heavy structures because it is prone to liquefaction. The engineer determines that for a stable foundation, there must be at least 10 feet of permeable topsoil under any heavy structure the company will be using. Can the company build on this area?
- A. Yes, the company can build everywhere in this area.
  - B. Yes, but the company can only build on a portion of the area.
  - C. No, the company cannot build anywhere on the area.
  - D. This cannot be determined.
35. A sample is taken of minerals 18 feet below the surface. What is the projected percentage of calcium carbonate content in the sample?
- F. 5%
  - G. 18%
  - H. 32%
  - J. 85%
36. Suppose  $\text{CaCO}_3$  cannot be collected from permeable topsoil or highly plastic clay but can only be found in limestone bedrock. How far must the company dig in order to begin the collection of calcium carbonate?
- A. 10 feet
  - B. 30 feet
  - C. 40 feet
  - D. 50 feet
37. Suppose that actual water capacity varies uniformly according to depth, with the values given in Table 2 representing the actual water capacities at the middle portions of the three soil horizons. The engineer takes a sample of soil and finds that it contains  $1.1 \text{ in}^3/\text{ft}^3$  of water. Which of the following is the least likely depth from which he could have taken this sample?
- F. 5 feet
  - G. 15 feet
  - H. 25 feet
  - J. 45 feet
38. Soil liquefaction occurs when stress or pressure is applied to soil with water content too large to allow for the soil to remain in a dry solid state. Highly plastic clay is itself prone to liquefaction due to its high average water capacity. Which of the following is least likely to contribute to the soil's potential to liquefy?
- A. The low average water capacity of limestone bedrock, because water cannot enter the bedrock and becomes stuck in the permeable topsoil and highly plastic clay
  - B. The high calcium carbonate content of limestone bedrock, because it makes the bedrock more porous
  - C. The plasticity of highly plastic clay when the clay mixes with water, which causes it to move more freely
  - D. The permeability of the permeable topsoil, because it allows water to flow through it and become absorbed more quickly

**END OF MINI-TEST FIVE**

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UNTIL TOLD TO DO SO.**