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ENGLISH TEST QUESTIONS

**Click on the letter choices to determine if you have
the correct answer and for question explanations.**
*(An actual ACT English Test contains 75 questions
to be answered in 45 minutes.)*

DIRECTIONS: In the passage that follows, certain words and phrases are underlined and numbered. In the right-hand column, you will find alternatives for the underlined part. In most cases, you are to choose the one that best expresses the idea, makes the statement appropriate for standard written English, or is worded most consistently with the style and tone of the passage as a whole. If you think the original version is best, choose "NO CHANGE." In some cases, you will find in the right-hand column a question about the underlined part. You are to choose the best answer to the question.

You will also find questions about a section of the passage, or about the passage as a whole. These questions do not refer to an underlined portion of the passage, but rather are identified by a number or numbers in a box.

For each question, choose the alternative you consider best and fill in the corresponding oval on your answer document. Read the passage through once before you begin to answer the questions that accompany it. For many of the questions, you must read several sentences beyond the question to determine the answer. Be sure that you have read far enough ahead each time you choose an alternative.

Bessie Coleman: In Flight

[1]

After the final performance of one last
practice landing, the French instructor nodded to the young African-American woman at the controls and jumped down to the ground. Bessie Coleman was on her own now. She lined up the nose of the open cockpit biplane on the runway's center mark, she gave the engine full throttle, and took off into history.

[2]

It was a long journey from the American

1. **A.** NO CHANGE
   B. one finally ultimate
   C. one final
   D. one last final

2. **F.** NO CHANGE
   G. off
   H. along
   J. OMIT the underlined portion.

3. **A.** NO CHANGE
   B. mark,
   C. mark, Coleman
   D. mark that

Southwest she'd been
_____ born in 1893, to these French skies.
4

The year in which she was born was about a century ago.
_____
5

There hadn't been much of a future for her in Oklahoma

both semesters of the two-semester year
then. After _____
6

at Langston Industrial College, Coleman headed for

Chicago to see what could be done to realize a dream.

Ever since she saw her first airplane when she was

a little girl, Coleman had known that someday, somehow,

she would fly.

[3]

Try as she might, however, Coleman could

not obtain flying lessons anywhere in the city. Then

Abbott
she sought aid from Robert S. _____ of the *Chicago*
7

Weekly Defender. The newspaperman got in touch

with a flight school in France that was willing to

teach this determined young woman to fly.

[4]

they're, she had as
[1] While _____ one of her
8

instructors Anthony Fokker, the famous aircraft

designer. [2] Bessie Coleman took a quick course in

should she settle
French, _____ her affairs, and sailed for
9

4. F.   NO CHANGE

    G.   Southwest that she'd been

    H.   Southwest, where she'd been

    J.   Southwest, she was

5. A.   NO CHANGE

    B.   It is now just about a century since the year of her birth.

    C.   Just about a century has passed since the year of her birth.

    D.   OMIT the underlined portion.

6. F.   NO CHANGE

    G.   a year

    H.   a year like two full semesters

    J.   one year filled with two semesters

7. A.   NO CHANGE

    B.   Abbott:

    C.   Abbott, whose

    D.   Abbott;

8. F.   NO CHANGE

    G.   they're

    H.   there,

    J.   there, she had as

9. A.   NO CHANGE

    B.   as if to settle

C.   to settle

D.   settled

Europe. [3] Coping with a daily/10 foreign language and flying in capricious, unstable machines held together with baling wire was daunting, but Coleman

10. F.   NO CHANGE

G.   (Place after *with*)

H.   (Place after *flying*)

J.   (Place after *in*)

persevered. 11

[5]

On June 15, 1921, Bessie

11. Which of the following sequences of sentences will make Paragraph 4 most logical?

A.   NO CHANGE

B.   1, 3, 2

C.   2, 1, 3

D.   3, 2, 1

Coleman, earned an international pilot's license, /12 issued by the International Aeronautical Federation. Not only was she the first black woman to win her pilot's wings, she was the first American woman to hold this coveted license.

12. F.   NO CHANGE

G.   Coleman earned an international pilot's license

H.   Coleman, earned an international pilot's license

J.   Coleman earned an international pilot's license;

[6]

She was ready for a triumphant return to the United States to barnstorm and lecture proof/13 that if

13. A.   NO CHANGE

B.   lecture and proof

C.   lecture, proof

D.   lecture proof,

the will is strong enough for/14 one's dream can be attained.

14. F.   NO CHANGE

G.   stronger than

H.   strongly enough,

J.   strong enough,

Question 15 asks about the preceding passage as a whole.

The writer intends to add the following sentence to the essay in order to provide a comparison that

would help underline the challenges that Bessie Coleman faced:

Her dream of becoming the world's first black woman pilot seemed as remote in Chicago as it had been in Oklahoma.

In order to accomplish this purpose, it would be most logical and appropriate to place this sentence after the:

15. **A.** first sentence in Paragraph 2.

   B. first sentence in Paragraph 3.

   C. last sentence in Paragraph 3.

   D. first sentence in Paragraph 5.

MATHEMATICS TEST QUESTIONS

DIRECTIONS: Solve each problem, choose the correct answer, and then fill in the corresponding oval on your answer document.

Do not linger over problems that take too much time. Solve as many as you can; then return to the others in the time you have left for this test.

You are permitted to use a calculator on this test. You may use your calculator for any problems you choose, but some of the problems may best be done without using a calculator.

Note: Unless otherwise stated, all of the following should be assumed.

1. Illustrative figures are NOT necessarily drawn to scale.
2. Geometric figures lie in a plane.
3. The word *line* indicates a straight line.
4. The word *average* indicates arithmetic mean.

---

1. Which of the following is equivalent to $(x)(x)(x)(x)$, for all x ?

A. $4x$

B. x^4

C. $x + 4$

D. 4^x

E. $2x^2$

---

2. A rectangle is twice as long as it is wide. If the width of the rectangle is 3 inches, what is the rectangle's area, in square inches?

F. 6

G. 9

H. 12

J. 15

K. 18

3.   A vendor has 14 helium balloons for sale: 9 are yellow, 3 are red, and 2 are green. A balloon is selected at random and sold. If the balloon sold is yellow, what is the probability that the next balloon, selected at random, is also yellow?

A. $\frac{8}{13}$

B. $\frac{9}{13}$

C. $\frac{5}{14}$

D. $\frac{8}{14}$

E. $\frac{9}{14}$

4. $3 \times 10^{-4} = ?$

F. –30,000

G. –120

H. 0.00003

J. 0.0003

K. 0.12

5.
For all $x > 0$, $\frac{2x^2 + 14x + 24}{x + 4}$ simplifies to:

A. $x + 3$

B. $x + 4$

C. $2(x + 3)$

D. $2(x + 4)$

E. $2(x + 3)(x + 4)$

6.   If one leg of a right triangle is 8 inches long, and the other leg is 12 inches long, how many inches long is the triangle's hypotenuse?

F. $4\sqrt{13}$

G. $4\sqrt{10}$

H. $2\sqrt{10}$

J. $4\sqrt{5}$

K. **4**

7.   In the standard (x, y) coordinate plane, the graph of $(x - 2)^2 + (y + 4)^2 = 9$ is a circle. What is the area enclosed by this circle, expressed in square coordinate units?

A. 3π

B. 4π

C. 6π

D. 9π

E. **16** π

8.   How many solutions are there to the equation $x^2 - 15 = 0$?

F. 0

G. 1

H. 2

J. 4

K. **15**

9.   A circle with center $(-3,4)$ is tangent to the x-axis in the standard (x,y) coordinate plane. What is the radius of this circle?

A. 3

B. 4

C. 5

D. 9

E. **16**

10.

In $\triangle ABC$, if $\angle A$ and $\angle B$ are acute angles, and $\sin A = \frac{10}{13}$, what is the value of $\cos A$?

F. $\frac{\sqrt{69}}{13}$

G. $\frac{\sqrt{3}}{13}$

H. $\frac{3}{13}$

J. $\frac{3\sqrt{13}}{13}$

K. $\sqrt{\frac{3}{13}}$

11.

What are the values of a and b, if any, where $a|b - 2| < 0$?

A. $a < 0$ and $b \neq 2$

B. $a < 0$ and $b = 2$

C. $a \neq 0$ and $b > 2$

D. $a > 0$ and $b < 2$

E. There are no such values of a and b.

12.

In a shipment of 1,000 light bulbs, $\frac{1}{40}$ of the bulbs were defective. What is the ratio of defective bulbs to nondefective bulbs?

F. $\frac{1}{25}$

G. $\frac{1}{39}$

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

J. $\frac{39}{1}$

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

READING TEST QUESTIONS

Click on the letter choices to determine if you have the correct answer and for question explanations.
(An actual ACT Reading Test contains 40 questions to be answered in 35 minutes.

DIRECTIONS: The passage in this test is followed by several questions. After reading the passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passage as often as necessary.

PROSE FICTION: This passage is adapted from Elizabeth Bishop's short story "The Housekeeper" (©1984 by Alice Methfessel).

        Outside, the rain continued to run down the
    screened windows of Mrs. Sennett's little Cape Cod
    cottage. The long weeds and grass that composed the
    front yard dripped against the blurred background of
5   the bay, where the water was almost the color of the
    grass. Mrs. Sennett's five charges were vigorously
    playing house in the dining room. (In the wintertime,
    Mrs. Sennett was housekeeper for a Mr. Curley, in
    Boston, and during the summers the Curley children
10 boarded with her on the Cape.)

        My expression must have changed. "Are those
    children making too much noise?" Mrs. Sennett
    demanded, a sort of wave going over her that might
    mark the beginning of her getting up out of her chair. I
15 shook my head no, and gave her a little push on the
    shoulder to keep her seated. Mrs. Sennett was almost
    stone-deaf and had been for a long time, but she could
    read lips. You could talk to her without making any
    sound yourself, if you wanted to, and she more than
20 kept up her side of the conversation in a loud, rusty
    voice that dropped weirdly every now and then into a
    whisper. She adored talking.

        To look at Mrs. Sennett made me think of eigh-
    teenth-century England and its literary figures. Her hair
25 must have been sadly thin, because she always wore,
    indoors and out, either a hat or a sort of turban, and
    sometimes she wore both. The rims of her eyes were
    dark; she looked very ill.

        Mrs. Sennett and I continued talking. She said she
30 really didn't think she'd stay with the children another
    winter. Their father wanted her to, but it was too much
    for her. She wanted to stay right here in the cottage.

        The afternoon was getting along, and I finally left
    because I knew that at four o'clock Mrs. Sennett's "sit
35 down" was over and she started to get supper. At six

o'clock, from my nearby cottage, I saw Theresa coming through the rain with a shawl over her head. She was bringing me a six-inch-square piece of spicecake, still hot from the oven and kept warm between two soup plates.

A few days later I learned from the twins, who brought over gifts of firewood and blackberries, that their father was coming the next morning, bringing their aunt and her husband and their cousin. Mrs. Sennett had promised to take them all on a picnic at the pond some pleasant day.

On the fourth day of their visit, Xavier arrived with a note. It was from Mrs. Sennett, written in blue ink, in a large, serene, ornamented hand, on linen-finish paper:

. . . Tomorrow is the last day Mr. Curley has and the Children all wanted the Picnic so much. The Men can walk to the Pond but it is too far for the Children. I see your Friend has a car and I hate to ask this but could you possibly drive us to the Pond tomorrow morning? . . .

Very sincerely yours,

Carmen Sennett

After the picnic, Mrs. Sennett's presents to me were numberless. It was almost time for the children to go back to school in South Boston. Mrs. Sennett insisted that she was not going; their father was coming down again to get them and she was just going to stay. He would have to get another housekeeper. She said this over and over to me, loudly, and her turbans and kerchiefs grew more and more distrait.

One evening, Mary came to call on me and we sat on an old table in the back yard to watch the sunset.

"Papa came today," she said, "and we've got to go back day after tomorrow."

"Is Mrs. Sennett going to stay here?"

"She said at supper she was. She said this time she really was, because she'd said that last year and came back, but now she means it."

I said, "Oh dear," scarcely knowing which side I was on.

"It was awful at supper. I cried and cried."

"Did Theresa cry?"

"Oh, we all cried. Papa cried, too. We always do."

80   "But don't you think Mrs. Sennett needs a rest?"

"Yes, but I think she'll come, though. Papa told
her he'd cry every single night at supper if she didn't,
and then we all *did*."

The next day I heard that Mrs. Sennett was going
85   back with them just to "help settle." She came over the
following morning to say goodbye, supported by all
five children. She was wearing her traveling hat of
black satin and black straw, with sequins. High and
somber, above her ravaged face, it had quite a Spanish-
90   grandee air.

"This isn't really goodbye," she said. "I'll be back
as soon as I get these bad, noisy children off my
hands."

But the children hung on to her skirt and tugged at
95   her sleeves, shaking their heads frantically, silently
saying, *"No! No! No!"* to her with their puckered-up
mouths.

1.   According to the narrator, Mrs. Sennett wears a hat because she:

   A.   is often outside.

   B.   wants to look like a literary figure.

   C.   has thin hair.

   D.   has unique taste in clothing.

2.   Considering the events of the entire passage, it is most reasonable to infer that Mrs. Sennett calls the children bad (line 92) because she:

   F. is bothered by the noise they are making.

   G.   doesn't like them hanging on her skirt.

   H.   doesn't want to reveal her affection for them.

   J. is angry that they never do what she tells them.

3. Considering how Mrs. Sennett is portrayed in the passage, it is most reasonable to infer that the word *ravaged*, as it is used in line 89, most nearly means that her face reveals:

   A.   irritation and annoyance.

7. It is reasonable to infer from the passage that Mrs. Sennett asked "Are those children making too much noise?" (lines 11–12) because Mrs. Sennett:

   A. concerns herself about the well-being of others.

   B. wishes to change the subject to literary figures.

   C. cannot supervise the children without the narrator.

   D. is bothered by the noise the children make.

8.   The details and events in the passage suggest that the friendship between the narrator and Mrs. Sennett would most accurately be described as:

   F. stimulating, marked by a shared love of eccentric adventures.

   G.   indifferent, marked by occasional insensitivity to the needs of the other.

   H.   considerate, notable for the friends' exchange of favors.

   J. emotional, based on the friends' long commitment to share their burdens

B. resentfulness and anger.

C. age and fatigue.

D. enthusiasm and excitement.

4. What is the main insight suggested by the conversation in lines 69–83?

F. The Curley family cries to manipulate Mrs. Sennett into doing what they want.

G. The narrator regrets that she is not going to Boston and is a little jealous of Mrs. Sennett.

H. Mrs. Sennett is happy to leave the Curley family because they are always whining and crying.

J. Mrs. Sennett intends to return to the Cape soon because she has discovered that they have been manipulating and taking advantage of her.

5. Which of the following does the passage suggest is the result of Mrs. Sennett's loss of hearing?

A. She is often frustrated and short-tempered.

B. She can lip-read.

C. She dislikes conversation.

D. She is a shy and lonely woman.

6. Given the evidence provided throughout the passage, the children probably silently mouth the word "no" (lines 94–97) because:

F. Mrs. Sennett has just called them bad, noisy children, and they are defending themselves.

G. they do not want to leave the Cape before the summer is over and are protesting.

H. they are letting the narrator know that Mrs. Sennett is thinking about returning to the Cape.

J. they are continuing their battle against Mrs. Sennett's intention to return to the Cape.

with one another.

9. As it is used in line 3, the word *composed* most nearly means:

A. contented.

B. unexcited.

C. satisfied.

D. constituted.

10. At what point does Mr. Curley cry at the supper table?

F. Before Mary and the narrator sit and watch the sunset

G. Before Mrs. Sennett tells the narrator she doubts she will stay another winter with the children

H. Before the children spend a rainy afternoon playing house in the dining room

J. After the narrator learns that

4 ○ ○ ○ ○ ○ ○ ○ ○ ○ **4**

DIRECTIONS: The passage in this test is followed by several questions. After reading the passage, choose the best answer to each question and fill in the corresponding oval on your answer document. You may refer to the passage as often as necessary.

You are NOT permitted to use a calculator on this test.

Abandoned cornfields have been the sites of investigations concerning *ecological succession*, the orderly progression of changes in the plant and/or animal life of an area over time (see Figure 1).

(Note: The plants are ordered according to their appearance during ecological succession.)

| age in years | | 1 | 2 | 3–20 | | 25–100 | 150+ |
| community type | bare field | grassland | | grass-shrub | | pine forest | oak-hickory forest climax |

crabgrass   horseweed   aster   broomsedge   shrubs   pine   hardwood understory   oak   hickory
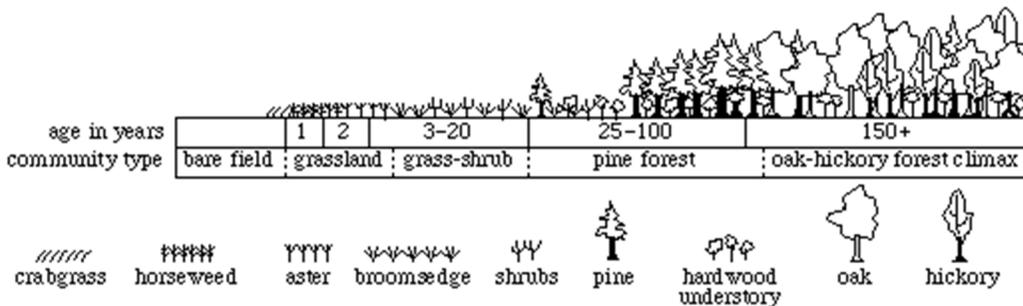
Figure 1

During the early stages of succession, the principal *community* (living unit) that dominates is the *pioneer community*. Pioneer plants are depicted in Figure 2.

Key
height of bars = average height of plants
20″
width of bars = summed diameter of stems/unit area
10″

M = March
J = June
S = September
D = December

M J S D M J S D M J S D M J S D
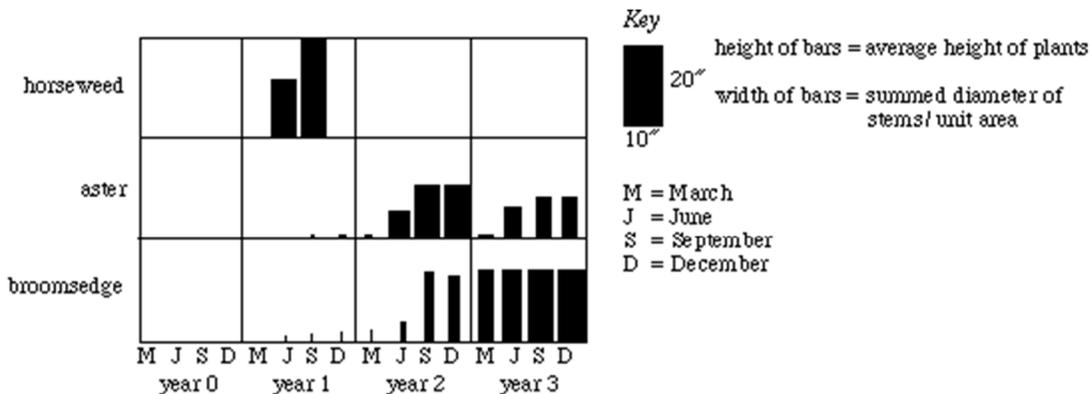year 0   year 1   year 2   year 3

Figure 2

The final stage of ecological succession is characterized by the presence of the *climax community*, the oak-hickory forest. Figure 3 depicts the gradual change from pine to hardwoods.
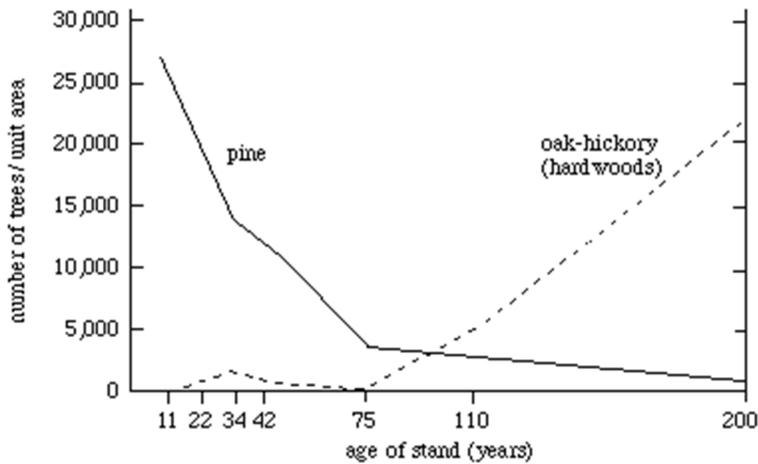
number of trees/unit area
age of stand (years)

Figure 3

Figures adapted from Eugene P. Odum, *Fundamentals of Ecology*. ©1971 by Saunders College Publishing/Holt, Rinehart, and Winston, Inc.

1. On the basis of the data presented in Figure 1, approximately 80 years after the abandonment of cropland, the land would contain:

   A.   pine seedlings only.

   B.   oak-hickory hardwood forests only.

   C.   early invading species like horseweed, aster, and broomsedge.

   D.   large pine trees with an understory of hardwood trees.

2. According to the information in Figure 3, a 150-year-old climax community would contain oak and hickory trees with a density of approximately:

   F.   3,000 trees per unit area.

   G.   5,000 trees per unit area.

   H.   15,000 trees per unit area.

   J.   20,000 trees per unit area.

3. On the basis of the data depicting the gradual change from pine forest to an oak-hickory forest, after 100 years, as the density of the pine trees:

   A.   increases, the density of the oak-hickory trees increases.

   B.   increases, the density of the oak-hickory trees decreases.

4. Given the information in Figure 1, which of the following conclusions concerning ecological succession in an abandoned cornfield is most correct?

   F. Succession in an abandoned cornfield begins on bare rock.

   G.   Succession is characterized by the replacement of one plant community by another until a climax community has been achieved.

   H.   The height of the plants in the communities decreases as succession progresses to the climax stage.

   J.   The plant species change continuously during succession, but the change is more rapid in the later stages than in the earlier stages.

5. According to Figure 2, pioneer plant(s) showing a progressive increase in summed diameter of stems per unit area over the course of several years of succession is(are):

   A.   horseweed only.

   B.   broomsedge only.

   C.   aster and broomsedge only.

   D.   horseweed, aster, and broomsedge.

C. decreases, the density of the oak-hickory trees increases.

D. decreases, the density of the oak-hickory trees decreases.