

英 語

問題冊子 2

注 意

「問題冊子 2」に印刷されている問題は、**2** から **3** までで、2 ページから 16 ページまであります。

3
|
国

英

語

2 次の対話の文章を読んで、あとの各問に答えなさい。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

Ken and Tom go to the same high school in the U.S.A. Ken is a student from Japan. One Sunday afternoon, they are in a department store and have just finished shopping.

Ken: It's already six o'clock. We're going to be late.

Tom: Let's hurry home.

Ken: Oh, no! All the elevators have gone.

Tom: What a bad luck!

Ken: And, the elevators are so slow. They should .

Tom: There are already three elevators in this department store, but ⁽²⁾all of them are arriving at the 1st floor. *At least one elevator should be up here. Actually, I often have the same experience.

Ken: Me, too! Why does it happen?

Tom: Are we just unlucky? Let's ask Mr. Jones. I'm sure he knows something about it.

Ken: That's a good idea.

The next day, Ken and Tom visit Mr. Jones, a science teacher after school.

Tom: Hello, can we talk for a minute?

Ken: We need your help.

Mr. Jones: Sure.

Sana: Hi, Tom.

Tom: Hi, Sana. Ken, this is Sana. She's a student from *Saudi Arabia.

Ken: Nice to meet you.

Sana: Nice to meet you, too.

Mr. Jones: How can I help you?

Ken: We went shopping at a department store yesterday. When we were trying to catch an elevator on the 10th floor, all the elevators were arriving at the 1st floor and we had to wait so long.

Tom: There were three elevators, and we often have the same experience.

Ken: We want to know why it happens.

Mr. Jones: Well, do you think it happens *by chance?

Tom: I think so.

Mr. Jones takes a piece of paper and starts to draw Chart I.

Mr. Jones: Look at Chart I.⁽³⁾ Elevators X, Y, and Z move *clockwise along the *edge of the circle. When they go up, they move along the left side of the circle, and when they go down, they move along the right side of the circle.

Ken: I see.

Mr. Jones: Now, they're on the 2nd, 6th, and 8th floor. Elevators X and Z are going down, and elevator Y is going up. If we draw a line from the center of the circle to each of elevators X, Y, and Z, we can *divide the circle into three. Then we have three *angles of 120° in the circle.

Sana: If all the elevators in the circle move at the same speed and keep these angles, we don't have to wait so long, right?

Mr. Jones: Yes, but the elevators sometimes get close to each other.

Ken: How does that happen?

Mr. Jones: Let's say many people finish lunch at the 10th floor restaurants and are waiting for elevator Y to get down to the 1st floor. Do you know what happens?

Tom: Many people take elevator Y. So, it has a (4)-a stop both on the 10th floor and on the 1st floor because they get in or out.

Mr. Jones: How about elevators X and Z ?

Sana: Many people take elevator Y, and fewer people take elevators X and Z.

Ken: Then, elevators X and Z travel (4)-b and get close to elevator Y.

Mr. Jones: That's right.

Tom: Do you know how to solve this problem?

Mr. Jones: Some companies work very hard to solve it.

Sana: I hear they're trying to increase the speed of elevators and make them bigger to carry more people at the same time.

Mr. Jones: Yes, and there is another way to solve it.

Tom: (5)-a

Mr. Jones: It's by improving elevator *algorithms.

Ken: Elevator algorithms?

Mr. Jones: They're how elevators are *controlled.

Ken: Controlled? If we *press an elevator button, the elevator closest to us comes, right?

Mr. Jones: Of course it does, but it's not so simple when there are two or more elevators in a building and many people are waiting on different floors.

Sana: How are they controlled?

Mr. Jones: Elevators today are controlled by several *factors.

Tom: Can you tell us more about the factors?

Mr. Jones: Sure. I'll tell you about three important factors. The first factor is *average waiting time.

Tom: It's ⁽⁶⁾ ① all the ② important ③ people ④ about ⑤ for ⑥ to ⑦ waiting ⑧ think]
the elevator and reduce the time.

Mr. Jones: The second factor is *rate of long waiting.

Sana: What's that?

Mr. Jones: It's the rate of people waiting on each floor for more than one minute.

Ken:

Mr. Jones: People start to get angry when they wait for more than one minute.

Sana:

Mr. Jones: The third factor is how many times elevators stop when they move up and down.

Tom: Does it make any difference?

Mr. Jones: If the number of floor stops are reduced, we can travel faster.

Sana: Now I know why they pass floors when they're full.⁽⁷⁾

Mr. Jones: Some of these factors are *simulated by computers.

Ken: Simulated?

Mr. Jones: Yes, the computers know how many people use the elevators and when people use them.

Tom: Wow.

Mr. Jones: I'll give you a quiz.

Mr. Jones starts to draw Chart II.











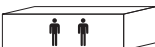

	the number of people waiting for an elevator	the average waiting time	elevator A	elevator B	elevator C	elevator D
10th floor		30 seconds				
9th floor						
8th floor	 you	0 seconds				
7th floor		10 seconds				
6th floor						
5th floor						
4th floor						
3rd floor						
2nd floor						
1st floor		20 seconds				

Chart II

- All the elevators move at the same speed, and each of them can carry five people at the same time.
- Elevators A and B are going down and elevators C and D are going up.
- All the people in elevator C are going straight up to the 10th floor.
- All the people in elevator D are going straight up to the 9th floor.
- Three people are waiting on the 1st floor to go straight up to the 10th floor.
- Two people are waiting on the 7th floor to go straight down to the 1st floor.
- Five people are waiting on the 10th floor to go straight down to the 1st floor.

Mr. Jones: Let's say you are on the 8th floor and have just pressed the elevator button to go down to the 1st floor in an elevator. The elevator getting closer to you will stop at your floor, but it doesn't stop at your floor when your waiting time is shorter than the average waiting time of the people on the 7th or 9th floor. Also, it doesn't stop when it's full. Which elevator will stop at your floor?

Everyone is thinking quietly.

Tom: I understand.

Sana: Me, too.

Ken: Maybe, (8) ?

Mr. Jones: That's right. Today, elevators are improving more.

Ken: (5)-d

Mr. Jones: In some places, we can find elevators with *screen panels. If we press a floor button on the screen panels before we get in the elevator, they show us which elevator to take. People move and take the elevator shown on the screen panel.

Tom: That way, people going to the same floor can be collected on the same elevator. We can travel faster because the number of floor stops will be reduced.

Ken: Amazing!

Mr. Jones: People designing elevators must know about *cultural differences and use different systems and programs in different countries.

Tom: Why do they have to do that?

Mr. Jones: Tell me about elevators in your country or how people use them.

Sana: In my country, many people take an elevator at *certain hours several times a day for *religious reasons, so we need elevators to carry a large number of people quickly at the same time.

Ken: In Japan, when people are waiting for an elevator, they usually stand in line, so some elevators in Japan show which elevator is coming next.

Tom: In the U.S., we keep more space between people, so we have bigger elevators.

Sana: So many countries, so many customs.

Tom: When we create something, it's important to know how it works and understand what people in different cultures do and think.

Ken: Let's study more about the things around us and different cultures.

[注] at least 少なくとも Saudi Arabia サウジアラビア
by chance 偶然 clockwise 時計回りに
edge 端 divide 分ける angle 角度
algorithm アルゴリズム control 制御する press 押す
factor 要因 average 平均の rate 率
simulate シミュレーションをする
screen panel スクリーンパネル cultural 文化的な
certain ある特定の religious 宗教的な

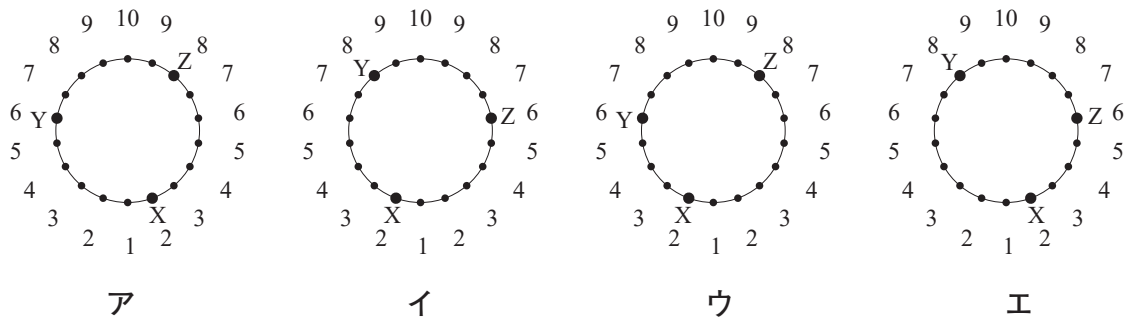
〔問1〕 本文の流れに合うように、 に英語を入れるとき、最も適切なものは次の中ではどれか。

- ア increase the number of stores
- イ increase the number of elevators
- ウ reduce the number of elevators
- エ reduce the number of stores

〔問2〕 ⁽²⁾ all of them are arriving at the 1st floor とあるが、その内容を次のように書き表すとすれば、 の中にどのような英語を入れるのがよいか。本文中の連続する3語で答えなさい。

all of them are the 1st floor.

〔問3〕 ⁽³⁾ Chart I を表している図として適切なものは次の中ではどれか。



The numbers from 1 to 10 show the floors of the building. X, Y, and Z are the elevators.

〔問 4〕 (4)-a と (4)-b の中に入る単語・語句の組み合わせとして最も適切なものは次の中ではどれか。

	(4)-a	(4)-b
ア	shorter	more slowly
イ	shorter	faster
ウ	longer	faster
エ	longer	more slowly

〔問 5〕 (5)-a ~ (5)-d の中に、それぞれ次の A ~ D のどれを入れるのがよいか。その組み合わせとして最も適切なものは下の ア ~ カ の中ではどれか。

- A Like what?
- B How do they do it?
- C Why is it important?
- D That's interesting.

	(5)-a	(5)-b	(5)-c	(5)-d
ア	A	B	D	C
イ	A	C	B	D
ウ	A	D	C	B
エ	B	A	C	D
オ	B	C	D	A
カ	B	D	A	C

〔問6〕 ⁽⁶⁾It's 【① all the ② important ③ people ④ about ⑤ for ⑥ to ⑦ waiting ⑧ think】
the elevator and reduce the time. とあるが、本文の流れに合うように、【 】内
 の単語・語句を正しく並べかえたとき、2番目と5番目と7番目にくるものの
 組み合わせとして最も適切なものは次のア～カの中ではどれか。

	2番目	5番目	7番目
ア	⑤	③	⑧
イ	⑤	⑥	④
ウ	⑤	⑦	⑧
エ	⑥	①	⑦
オ	⑥	⑤	③
カ	⑥	⑦	①

〔問7〕 ⁽⁷⁾they pass floors when they're full とあるが、この理由として最も適切なもの
 は次の中ではどれか。

- ア If elevators stop at every floor, they can travel faster.
- イ If elevators stop at fewer floors, they can travel faster.
- ウ When elevators are full, people don't want to take them.
- エ When elevators are full, people try to take them.

〔問8〕 本文の流れに合うように、(8) の中に入るものは次の中ではどれか。

- ア elevator A
- イ elevator B
- ウ elevator C
- エ elevator D

〔問 9〕 (9) So many countries, so many customs. とあるが、その表す意味とほぼ同じ表現は次の中ではどれか。

- ア There are so many countries and customs that we should design the same kind of elevator.
- イ There are so many countries and customs in the world that it is difficult to tell the differences.
- ウ People in different countries must follow the custom of their own country.
- エ People in different countries have different ways of thinking and doing things.

〔問 10〕 本文の内容と合っているものを、次のア～カの中から一つ選びなさい。

- ア Tom and Ken went shopping at the department store but they couldn't find the elevators.
- イ When Tom and Ken were going home, they found only one elevator was on the 10th floor.
- ウ Some companies are trying to make faster and bigger elevators to improve the algorithms.
- エ Rate of long waiting is the rate of elevators waiting on each floor for more than one minute.
- オ Mr. Jones says some of the factors controlling elevators today are simulated by computers.
- カ Mr. Jones says some elevators have screen panels and the panels show which floor to go to.

3 次の文章を読んで、あとの各問に答えなさい。

(*印の付いている単語・語句には、本文のあとに〔注〕がある。)

My name is Ogawa Misaki. I teach Japanese at a high school in *Vancouver. Every year, in my first Japanese lesson, I tell my students about myself and my experiences, and I explain why I became a teacher of Japanese. I hope that my story will give some messages to my new students. I believe that learning Japanese will be a very good experience for them. This is my story.

After graduating from university, I became a music teacher at a junior high school in Japan, and I was asked to be a soccer *club adviser. I thought that it would be *impossible because the soccer club was for boys and I didn't like any sports. However, I knew that the soccer club members loved soccer and their club, and I decided to be the club adviser.

I had to understand the soccer rules, and the members helped me. With them, I learned about players and great teams around the world. I also learned about the history of soccer, and I became interested in different cultures. Then, I began to travel abroad, and I thought about living in a different country.

After the third-year members left the team in May, the first-year and second-year members needed to choose the next club captain. They asked Vance to be the captain because he was an excellent *goalkeeper and always practiced very hard. He liked teaching how to play soccer better, and he was respected by his teammates. (1)-a, he didn't say yes. He said, "I moved here from Canada last April, and I can't speak Japanese well. In addition to the language problem, I'm shy, and I have never been a captain or a leader." The other members encouraged Vance. I said, "I didn't think I would be this club adviser, and (2) I didn't think I could. But now I'm happy in this new situation." Finally, Vance became the team captain.

Our team was not strong, but there were 20 wonderful members. Some were quite good soccer players, and others were not so good at playing soccer. Each had a different and important *role. (1)-b, Yuta was one of the good soccer players. He always tried to understand what the other members were thinking and find ways to solve problems. Though Taro was not a very good player, he was good at *tactics. He learned tactics through watching soccer games all over the world on TV and on the Internet, and he shared the tactics with his teammates. I was sure that they would build a stronger team with their different *strengths and ideas.

Vance believed that it was necessary for the members to practice harder. He became angry when the team lost the games or his teammates didn't practice hard. He couldn't express his ideas clearly in Japanese, and he was often *irritated. His teammates were afraid of Vance, and

they couldn't speak to Vance easily. The communication between them got worse, and they kept losing all the games.

(3)

Vance was so shocked, and he learned that everyone thinks in different ways.

(1)-c, Vance talked with his teammates more often than before, and they tried to find better ways to be stronger. They started to *exchange their ideas more. The members tried to use English, and Vance made a big effort to learn Japanese. They understood that they needed to communicate well with each other to build a stronger team. They respected each other's differences, and they talked a lot to practice in more *effective ways. The communication improved a lot, and the team became much stronger than before.

The next July, our team lost the game against the strongest team in the area. That was the last game for Vance and the other third-year students. After the last game, Vance said to his teammates, “Now I know that the things 【 ① make ② are ③ strong ④ exchanging ⑤ not only ⑥ our team ⑦ but also ⑧ practicing hard ⑨ to 】 ideas. Thank you for supporting me all the time.” Yuta said, “Everyone here has learned something important in life through soccer and our club activities.” Vance said, “We have become stronger because we have communicated well with each other. And now, I'm not shy at all!” Everyone laughed.

I was glad that each club member tried something new and learned something from their experiences. Vance learned that effective leadership begins with effective (5). Using English was a new and quite difficult situation for the club members. However, most of them became more interested in English and started learning it harder.

I learned that we can have a new world through trying something new. Soccer was quite new to me, and it changed my life. Before I became a soccer club adviser, I never traveled to foreign countries. I started visiting soccer stadiums in various countries, and I made a lot of friends through traveling. After working as a music teacher for ten years, I decided to work and live abroad.

(1)-d, the club members showed me the importance of communication. I realized that we have to communicate well with other people to grow up as a person. I thought of becoming a teacher of Japanese in a foreign country because language has a strong *connection with communication. To teach at a high school in a foreign country, I thought that it would be the best way to study at a university in that same country. I was interested in Vancouver because Vance often talked about it. I learned that people in Vancouver respect each other's differences and they like to study languages different from their own language. So, (6) I came here.

After my story, I say to my students, "I'm always trying and learning new things, and my life is richer because of this. I have had a lot of new experiences such as being a soccer club adviser, studying at a university abroad, and working in a foreign country. ⁽⁷⁾ I believe that having another language is having a new life. When you communicate well with various people, your world will be bigger."

〔注〕 Vancouver バンクーバー (カナダの都市) club adviser 部活動の顧問
 impossible 不可能な goalkeeper ゴールキーパー
 role 役割 tactics 戦術 strength 長所
 irritated いらいらして exchange 交換する
 effective 効果的な connection 結びつき

〔問1〕 (1)-a ~ (1)-d の中に、それぞれ次のA~Dのどれを入れるのがよいか。その組み合わせとして最も適切なものは下のア~カの中ではどれか。

- A After that
- B Also
- C For example
- D At first

	(1)-a	(1)-b	(1)-c	(1)-d
ア	A	B	D	C
イ	A	C	B	D
ウ	C	B	D	A
エ	C	D	A	B
オ	D	C	A	B
カ	D	C	B	A

〔問2〕 I didn't think I could とあるが、Ms. Ogawa がこのように考えた理由として最も適切なものは次の中ではどれか。

- ア I didn't think of becoming a soccer club adviser because I wanted to teach Japanese.
- イ I didn't like sports and I could not take care of a soccer club for boys.
- ウ I understood that each member in the soccer club loved soccer so much.
- エ I knew that I would be a soccer club adviser before I became a music teacher.

〔問3〕 (3) の中には次の①～④の文が入る。本文の流れに合うように正しく並べかえたとき、その組み合わせとして最も適切なものは下のア～エの中ではどれか。

- ① “Vance, now you should know that everyone is different,” said Yuta.
- ② One day, Taro finally cried out to Vance, “We can't enjoy playing soccer with you!”
- ③ Another member said, “I want to be a doctor in the future, and I need more time to study.”
- ④ Some other members said that they also couldn't.

- ア ① → ③ → ④ → ②
- イ ① → ④ → ② → ③
- ウ ② → ③ → ④ → ①
- エ ② → ④ → ③ → ①

〔問4〕 (4) Now I know that the things 【① make ② are ③ strong ④ exchanging ⑤ not only ⑥ our team ⑦ but also ⑧ practicing hard ⑨ to】 ideas. とあるが、本文の流れに合うように、【 】内の単語・語句を正しく並べかえたとき、2番目と5番目と8番目にくるものの組み合わせとして最も適切なものは次のア～カの中ではどれか。

	2番目	5番目	8番目
ア	①	②	⑦
イ	①	②	⑧
ウ	①	③	②
エ	⑤	①	⑦
オ	⑤	③	⑥
カ	⑤	④	⑥

〔問5〕 本文中の の中にどのような英語を入れるのがよいか。本文中の1語で答えなさい。

〔問6〕 (6) I came here の内容を、語句を補って書き表したものとして最も適切なものは次の中ではどれか。

- ア I chose Vancouver because I was interested in Vance's stories and I found a strong connection between culture and language.
- イ I chose Vancouver because people here like to learn foreign languages to respect their own language and culture.
- ウ I came here because people in Vancouver respect differences in each person and they like to learn foreign languages.
- エ I came here because I wanted to grow up as a person and study music abroad after making a lot of friends around the world.

〔問 7〕 (7) I believe that having another language is having a new life. とあるが、Ms.Ogawa がバンクーバーの生徒に伝えたい内容を次のように書き表すとすれば、
 と の中にそれぞれどのような英語を入れるのがよいか。
 は本文中の連続する 2 語、 は本文中の連続する 3 語で
答えなさい。ただし、 には another 及び new を使ってはならない。

I believe that will show you .

〔問 8〕 本文の内容と合っているものを、次のア～カの中から一つ選びなさい。

ア At first, Ms. Ogawa didn't know the soccer rules, and she read soccer rule books by herself without anyone's help.

イ Vance was sometimes upset before becoming a captain because he wanted his teammates to practice harder.

ウ Ms. Ogawa was interested in foreign countries and wanted to go abroad before she became a soccer club adviser.

エ Vance learned the most important lesson because he always made a big effort to solve problems by himself.

オ Ms. Ogawa started traveling abroad and visiting various stadiums because she wanted to make a lot of friends.

カ Ms. Ogawa experienced a lot of new things after she became a music teacher at a junior high school in Japan.

〔問 9〕 この文章を読んで、下の英文の指示にこたえる英文を **30 語以上 40 語程度** の英語で書きなさい。英文は二つ以上になってもかまいません。ただし、部活動や語学学習に関わる活動を用いてはいけません。「.」「,」などは、語数に含めません。これらの符号は、解答用紙の下線部と下線部の間に入れなさい。

Imagine that you will experience something new to improve your communication skills. Write one of your ideas. What do you want to experience? And why do you think that it will improve your communication skills?

