

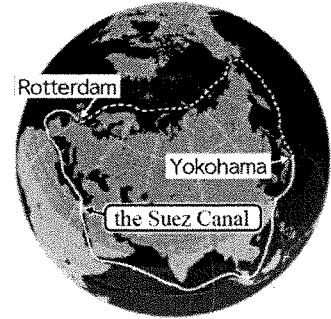
問1 次の文章は、オカ先生 (Ms. Oka) と高校生のユミ (Yumi) とリク (Riku) の会話の一場面である。会話文 I, II を読んで、あとの(ア)～(オ)の問いに答えなさい。

会話文 I

Ms. Oka : Have you heard about the *ship which goes through *ice in *the Arctic Ocean ?

Yumi : Yes, I have. Today almost all the ships go through *the Suez Canal to go from Japan to *Europe. But more ships may go through the Arctic Ocean in the future.

Ms. Oka : That's right. Look at this **Picture**. There are two *routes from Yokohama to *Rotterdam. When a ship goes through the Suez Canal, the route will be 21,000 km long. But if it goes through the Arctic Ocean, the route will be 12,600 km long. It means that the route through the Arctic Ocean is of the route through the Suez Canal. If a ship goes through the Arctic Ocean, the time it needs to go from Yokohama to Rotterdam will also be shorter, right ?



Picture

Yumi : Yes. It's a good thing because the ship can *save energy.

Riku : I think it may be hard for ships to go through the Arctic Ocean because there is a lot of ice there.

Ms. Oka : That's a good point. Do you have any ideas, Yumi ?

Yumi : I think it will be easier for ships to go through the Arctic Ocean because the ice has been *melting.

Ms. Oka : Very good. Look at this *graph. It shows *the Arctic Sea Ice Minimum Area from 1980 to 2020. Let's call the Arctic Sea Ice Minimum Area "ASIMA" here. Riku, what does the graph tell you ?

Riku : The 1980 ASIMA is the largest in the graph. The 1990 ASIMA is almost as large as the 2000 ASIMA. The 2010 ASIMA is smaller than the 2000 ASIMA. The ASIMA has gone down a lot from 1980 to today. I think this is because of *global warming.

Ms. Oka : That's another good point. The graph shows that the 2012 ASIMA is the smallest. Many people are *surprised to hear that.

Riku : What will happen to animals living in the Arctic Ocean if the ice there keeps melting ?

Yumi : I hear the number of *polar bears has been going down because they need ice to walk on and find food. They will have to swim a lot to get food if their *habitat of ice becomes smaller.

Ms. Oka : For example, some people living in the *area can't catch animals to eat because the area the people can move on has become smaller.

Riku : So it is not *safe for animals and humans to live in the area, right ?

Ms. Oka : Each route has good and bad points. How about learning more about the route through the Arctic Ocean and talking about it with me again tomorrow afternoon ?

Yumi : All right, I'll use the Internet to learn about the route.

Riku : Me, too.

会話文Ⅱ

- Ms. Oka : Hi, what did you learn yesterday about the new route through the Arctic Ocean ?
- Yumi : I learned a few things. Some countries, like *China, Japan, and *Russia, are interested in the route because it will help ships arrive *earlier than the route through the Suez Canal and it will save energy. Those countries also think that the new route is safer because ships that take the route through the Suez Canal are sometimes *attacked by *pirates.
- Riku : I learned some bad things about the new route. If more and more ships use the new route, more *accidents, for example, *oil spills, may happen. Those accidents will also *damage the area. It will not be good for the people and animals living there. When a ship has an accident on the new route, it has to stay at a *port. But there are only a few ports in the Arctic Ocean that the ship can use. If the ship can't reach any port for a long time, people on the ship will not get food or water.
- Yumi : I've heard that the route through the Suez Canal couldn't be used for a few days. Many ships couldn't move through it. We need a new route. If the new route through the Arctic Ocean were used, many ships could have another way.
- Riku : I see. If many people use the new route, they can visit the Arctic Ocean to see animals, like polar bears. It will be more difficult for the animals to live because their habitat is *fragile and may be damaged.
- Ms. Oka : You found some good and bad things about the new route, Yumi and Riku. When you learn and think about the good and bad points of something, you understand it better.

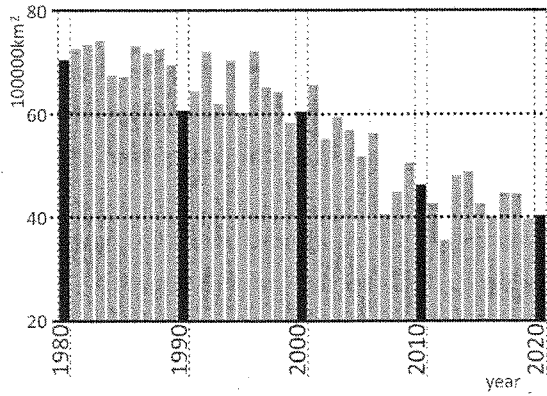
* ship : 船 ice : 氷 the Arctic Ocean : 北極海 the Suez Canal : スエズ運河 Europe : ヨーロッパ
routes : 航路 Rotterdam : ロッテルダム save energy : エネルギーを節約する
melting : melt (とける) の～ing形 graph : グラフ
the Arctic Sea Ice Minimum Area : 北極海の最小海氷面積 global warming : 地球温暖化
surprised : 驚いた polar bears : ホッキョクグマ habitat : 生息地 area : 地域 safe : 安全な
China : 中国 Russia : ロシア earlier than ～ : ～より早い
attacked : attack ～ (～を攻撃する) の過去分詞 pirates : 海賊 accidents : 事故
oil spills : 石油流出 damage ～ : ～を害する port : 港 fragile : 壊れやすい

(7) 会話文Ⅰの にあてはまるものとして最も適するものを、次の 1～8 の中から一つ選び、その番号を答えなさい。

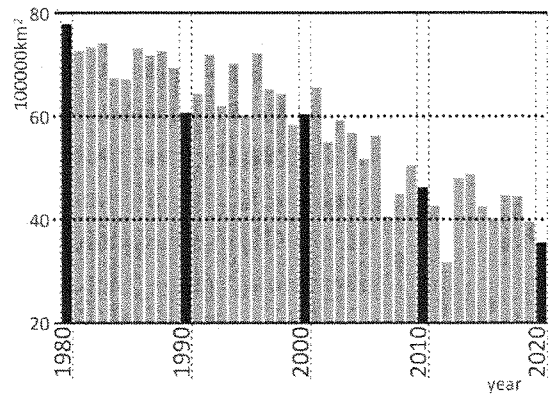
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|---------|---------|---------|---------|
| 1. 30% | 2. 40% | 3. 60% | 4. 70% |
| 5. 130% | 6. 140% | 7. 160% | 8. 170% |

(イ) 会話文 I の —— 線部 “this graph” を表しているグラフとして最も適するものを、次の 1～6 の中から一つ選び、その番号を答えなさい。

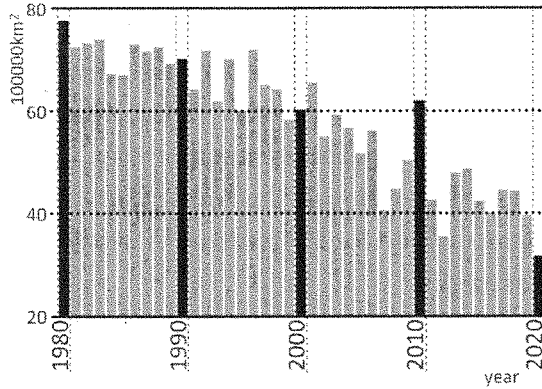
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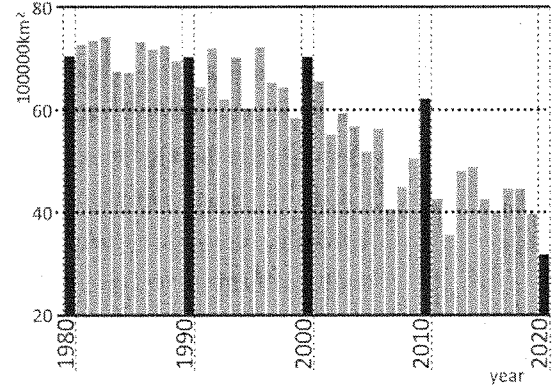
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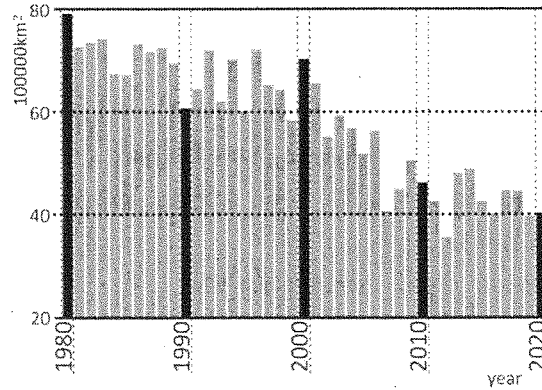
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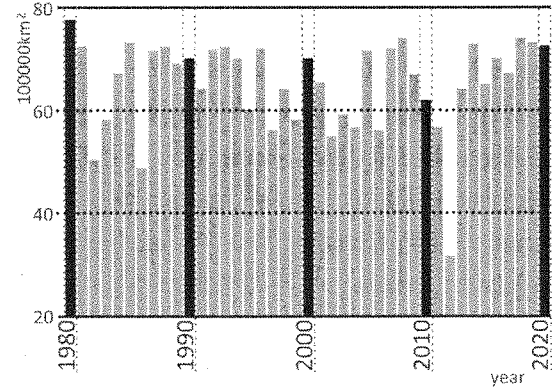
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6.



(グラフは ADS: Arctic Data archive System ウェブサイトより作成)

(ウ) 会話文 I, II の ~ のいずれにもあてはまらないものを、次の 1～4 の中から一つ選び、その番号を答えなさい。

1. We should think about these bad points.
2. To make them warm, we will decide when to carry it.
3. Melting ice has been changing people's lives, too.
4. Many people are trying to use the new route.

(エ) 次の a~c について、**会話文 I** の内容と合っているものは正、合っていないものは誤とする組み合わせとして最も適するものを、あとの 1~8 の中から一つ選び、その番号を答えなさい。

- a. More ships may go through the Arctic Ocean to go from Japan to Europe in the future.
- b. Polar bears can get more food because the ice in the Arctic Ocean has been melting.
- c. From Japan to Europe, the route through the Suez Canal is shorter than the route through the Arctic Ocean.

- | | | | |
|----|-------|-------|-------|
| 1. | a : 正 | b : 正 | c : 正 |
| 2. | a : 正 | b : 正 | c : 誤 |
| 3. | a : 正 | b : 誤 | c : 正 |
| 4. | a : 正 | b : 誤 | c : 誤 |
| 5. | a : 誤 | b : 正 | c : 正 |
| 6. | a : 誤 | b : 正 | c : 誤 |
| 7. | a : 誤 | b : 誤 | c : 正 |
| 8. | a : 誤 | b : 誤 | c : 誤 |

(オ) 次の英文は、オカ先生がユミとリクとの**会話文 II** の内容をまとめ、授業で紹介したものである。英文中の ~ にはあとの a~e のいずれかが入る。あてはまるものの組み合わせとして最も適するものを、1~8 の中から一つ選び、その番号を答えなさい。

Yumi and Riku have learned about the route through the Suez Canal and the route through the Arctic Ocean. Yumi learned that the route through the Arctic Ocean has some good points. But now many ships go through the Suez Canal. The new route will help ships arrive earlier and save energy. So, Yumi thinks using the new route is a good idea.

But Riku learned that there are also bad things about the new route. If the route is used, many people may often come to see animals living in the Arctic Ocean. So, Riku is worried about the animals living there. Riku also learned that more accidents may happen. There are only a few ports in the Arctic Ocean that the ships can use. I hope they understand them better now.

- a. It may be difficult for animals to live there because their habitat may be damaged.
- b. If accidents happen on the route, it will be hard for people on ships to get food and water.
- c. Yumi and Riku learned and thought about the good and bad points of the new route.
- d. Also, it will be safer for a ship to go through the route through the Arctic Ocean because ships are sometimes attacked by pirates on the route through the Suez Canal.
- e. If the route through the Suez Canal can't be used, many ships will use the new route.

- | | | | | | |
|----|-------|-------|-------|-------|-------|
| 1. | お : b | か : a | き : d | く : c | け : e |
| 2. | お : b | か : a | き : d | く : e | け : c |
| 3. | お : b | か : d | き : a | く : c | け : e |
| 4. | お : b | か : d | き : a | く : e | け : c |
| 5. | お : e | か : a | き : d | く : b | け : c |
| 6. | お : e | か : a | き : d | く : c | け : b |
| 7. | お : e | か : d | き : a | く : b | け : c |
| 8. | お : e | か : d | き : a | く : c | け : b |