

Understanding an explanation

Listen to a professor's explanation to practise and improve your listening skills.

Before listening

Do the preparation task first. Then listen to the audio and do the exercises.

Preparation task

Match the definitions (a–f) with the vocabulary (1–6).

Vocabulary

1. a lecture
2. geometry
3. a sequence
4. common
5. the Middle Ages
6. mathematician

Definitions

- a. a series of related numbers in a particular order
- b. a formal talk given to a group of people, especially at university
- c. a period in European history, approximately between the years 500 and 1500
- d. the study of lines, angles and surfaces in mathematics
- e. a person who studies or teaches mathematics
- f. found in many places

Tasks

Task 1

Circle the correct answer.

1. The professor says there ...
 - a. are lots of questions.
 - b. is only one question.
 - c. are no questions.

2. Fibonacci was ...
 - a. from central England.
 - b. the first in a sequence of scientists.
 - c. a mathematician.

3. What is the next number in this Fibonacci sequence: 1, 2, 3, 5, ...
 - a. 6
 - b. 7
 - c. 8

4. What does the professor say about Fibonacci numbers?
 - a. They are common.
 - b. They are uncommon.
 - c. They are very difficult to understand.

5. What does the professor promise?
 - a. To explain better
 - b. To bring examples to next class
 - c. To include this in the exam

Task 2

Put the words in order to make sentences.

1. not about the sequence. sure I'm

2. understand. I don't

3. get it. don't I

4. mean? does What Fibonacci

5. explain. Let me

6. it works. how is This

7. have Does anybody question? a

8. know? do to want you What

Discussion

What was the last lecture you went to about? Did the professor explain it clearly?

Transcript

Professor: OK, before we continue, does anybody have a question? Oh, lots of questions, I see. OK, we'll go one at a time. Yes?

Student: Thank you. You talked about Fibonacci numbers in the lecture. Sorry, I don't understand. Can you explain?

Professor: Of course. What do you want to know?

Student: OK ... I hope this isn't a silly question, but what does Fibonacci actually mean?

Professor: No question is ever silly – it's always good to ask. OK, it's the name of a person. Fibonacci was a European mathematician in the Middle Ages.

Student: Ah, OK. Thanks. So, we know he was a person, but what are the Fibonacci numbers? I don't get it.

Professor: The Fibonacci numbers are a sequence of numbers. They go 1, 1, 2, 3, 5, 8 and so on. Do you see the sequence? Do you see how it works?

Student: I'm not sure.

Professor: OK. This is how it works. The first number is 1, then 1 again, then 2. The third number is the first number plus the second number. The fourth number is the second number plus the third number: 1 plus 2 is 3. The fifth number is the third number, 2, plus the fourth number, 3. So the fifth number in a Fibonacci sequence is 5.

Student: Ah! I think I understand now. But what about their importance? You said these were very important.

Professor: Yes, let me explain. This sequence of numbers is important because we see it in many things. Fibonacci numbers are common in geometry, they are common in nature, for example in plants. We see the sequence everywhere.

Student: Could you give us some more examples?

Professor: OK ... well, we don't have time right now but I can bring more examples in for next class, OK?

Answers

Preparation task

1. b
2. d
3. a
4. f
5. c
6. e

Task 1

1. a
2. c
3. c
4. a
5. b

Task 2

1. I'm not sure about the sequence.
2. I don't understand.
3. I don't get it.
4. What does Fibonacci mean?
5. Let me explain.
6. This is how it works.
7. Does anybody have a question?
8. What do you want to know?