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An American company says it has completed the first permitted 3D-printed home in the United States. ①-36

The home was shown to reporters and visitors at the South by Southwest technology conference and music festival. The event took place earlier this month in Austin, Texas.

Building company ICON has developed large 3D printers that build homes with mortar, a hard and strong material. ICON uses robotics, computer software programs and advanced materials to make houses.

Jason Ballard is the company's co-founder. ①-37

"So I'm standing in front of the first permitted 3D-printed home in America. This house was actually printed in high winds, blowing dust and rain."

It is important for the printing process (1). The goal is to print homes in developing countries.

ICON's 3D printer is made of lightweight aluminum, and measures 4.5 meters tall by 9 meters wide. The homes are printed (2) on-site, so the equipment has to be light enough to move from one property to the next. ①-38

Ballard imagines that someday, many 3D printers will operate around the world to make homes. (3) It's actually a lot more simple to build a printer than it is to build a house, he said. ①-39

"We ran this printer at about a quarter speed to print this house, and we were able to complete the house in less than 48 hours of print time."

Ballard says that at full speed, the printing process could take as little as (4) hours.

ICON has teamed up with a not-for-profit group called New Story. (5) Together, they are attempting to help provide a quick, cheap housing solution for the millions of people who need it most. ①-40

Brett Hagler is founder and chief executive officer of New Story.

"The magnitude of the problem that we face is so big, it's about a billion people that don't have one of life's most basic human needs, and that's safe shelter."

Hagler says his organization already works on the housing needs of poor families in several neighborhoods. But he says that to really make a difference, the program will need to greatly expand.

He added that since the 3D printing process is so much faster than traditional homebuilding, a whole community could be built in just a few months.

1 Which is the best answer for (1)?

- ① to be completed as quickly as possible in the near future
② to be shown to everyone visiting the company
③ to start according to the plan designed by computer software programs
④ to operate in extreme conditions such as weather disasters

2 Which is the correct explanation for the underlined part (2)?

- ① after being constructed in factories
② where the homes will be built
③ on an official website
④ surrounded by people who will live there

3 Translate the underlined text (3) into Japanese.

4 Which is the best answer for (4)?

- ① 36 ② 24 ③ 16 ④ 12

5 Translate the underlined text (5) into Japanese.

6 Which answer matches the content of the passage?

- ① ICON completed the first permitted printed home using a lot of kits familiar to everyone.
② ICON's 3D printer is fairly light, so it can easily be moved from one place to the next.
③ Hagler is quite satisfied with the way his organization works on the housing needs of poor families.

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