

AZ Vocabulary

1. You can **construct an argument** to support or oppose a conjecture. A **conjecture** is a statement that is thought to be true but has not yet been proven.

When you construct an argument, give a clear and complete explanation, and use numbers, objects, drawings, or actions to justify your argument.

The land area of Texas is two hundred sixty-one thousand, two hundred thirty-two square miles. The number is written as 261,332. Construct a math argument that explains if the number is written correctly.

Sample answer: The number is written incorrectly.

The digit in the hundreds place should be a 2;

261,232.

Use the information in the **Area of Texas Cities** table to construct math arguments to explain if the conjectures are correct or incorrect.

Area of Texas Cities

City	Area (square kilometers)
Austin	704
Dallas	999
Fort Worth	904
Houston	1,625

2. Conjecture: Fort Worth has a greater area than Austin.

Yes; Sample answer:

904 > 704 because

9 hundreds are greater than 7 hundreds.

3. Conjecture: The 9 in the hundreds place in Dallas's area is ten times as great as the 9 in the ones place of its area.

No; Sample answer: The 9 in the hundreds place is ten

times as great as the 9 in the tens place.

On the Back!

4. The water area of Texas is seven thousand, three hundred sixty-five square miles. The number is written 7,365. Construct a math argument that explains if the number is written correctly or not.

The number is written correctly; Sample answer: Each digit is in the correct place.