1. Given the graph of the function below, find all the values in the domain of at which is **not** continuous.

|  |
| --- |
|  |

1. Find all values in the function below where it is defined but **not** continuous.

|  |
| --- |
|  |

In Exercises 3 to 8, use the definition of continuity and the properties of limits to show that the function is continuous at the given x value.

1. at
2. at
3. at
4. at
5. at
6. at 

Explain why the functions in questions 9 to12 are not continuous at the given number.

1. at

10. at

11. at

12. For what value of is the following function continuous at ?

## Solutions

is not continuous at and

is defined but not continuous at and . Note: is not continuous but also is not defined.

12.