

## Limits Values and Rates: Apply and Create



Use the matching sheet ID when checking answers.

Use what you learned to explain, construct or apply an idea.

1. Find the average rate of change of  $x^2$  from  $x = 2$  to  $x = 3$ .

Answer: 5

2. Explain why an undefined function value does not always mean the limit is absent.

Look for:

- Distinguishes approach from value at the point.

One possible response: A limit concerns nearby values. Here nearby values approach 2 although  $f(1)$  is undefined.

Open responses use criteria and an illustrative response. Other well-supported responses can be acceptable.