

# Reading and Interpreting Line Graphs

**Goal** • Practise interpreting scientific line graphs.

## Introduction

Interpreting data from a line on a line graph depends on skillfully estimating values along the “line of best fit”. This involves checking the location of the line in relation to the scales along the two axes.

## What to Do

- Refer to the graph you drew in BLM G-34, Constructing a Line Graph, to answer the following questions.

## Questions

1. a. What general pattern is formed by the line for Data Set #1?

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- b. Relate this pattern to the source of the data. What does the pattern say about the way the cyclist performed in the race?

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2. The process of determining the value of a point on the line between marked data points is called interpolation.

- a. Select a place on the line for Data Set #1 between two data points. From that place, draw a light horizontal line to the  $y$ -axis and a light vertical line to the  $x$ -axis.

- b. About how many seconds had the cyclist been racing?

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- c. About how many metres had the cyclist covered?

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3. How many seconds has each cyclist raced when the total distance covered is:

	Cyclist #1	Cyclist #2
a. 37 m	_____ s	_____ s
b. 16 m	_____ s	_____ s

4. How many metres has each cyclist covered when the approximate time raced is:

	Cyclist #1	Cyclist #2
a. 7 s	_____ s	_____ s
b. 15 s	_____ s	_____ s

5. On the back of this page, explain how line graphs could be useful for predicting scientific trends. Provide a specific example to illustrate your explanation.