

# Checklist

## What you should know

By the end of this subtopic you should be able to:

- create linear, quadratic, cubic, exponential, power, and sine regression models using technology
- calculate the sum of square residuals for a linear model
- use the sum of square residuals as a measure of fit for a model
- evaluate the coefficient of determination ( $R^2$ ) using technology
- interpret the meaning of the coefficient of determination as the proportion of variability in the responsive variable accounted for by the chosen model
- analyse various factors, including the coefficient of determination, to determine whether a certain model is the best fit for a given data set.

