

Note 7.2 Growth and Decay

1. The price of a bottle of wine is \$950 and its price will increase at a constant rate of 8% for the first 4 years. Find the price of the bottle of wine after 4 years.
(Give the answers correct to the nearest dollar.)

2. In an experiment, a piece of metal is heated and its temperature increases 20% each minute. The experiment stops after 8 minutes when the temperature of the piece of metal reaches(到達) 120°C.
 - (a) Find the original temperature of the piece of metal.
 - (b) Find the overall percentage increase in the temperature.(Give the answers correct to 3 significant figures.)

3. A supermarket has 24 000 cartons of lemon tea in stock(存貨) and the number is decreased by 6% each day.
 - (a) Find the number of cartons of lemon tea in stock after 7 days.
 - (b) Find the number of cartons of lemon tea sold in 7 days.(Give the answers correct to the nearest integer.)