# Appreciation and depreciation   Int. 2 pp 2001 - 2011

## 2001 P2

1. The population of a city is increasing at a steady rate of 2·4% per annum. The present population is 528 000.

   What is the expected population in 4 years time?

   Give your answer to the nearest thousand.                                    3

## 2002 P2

10. The population of Newtown is 50 000.

    The population of Newtown is **increasing** at a steady rate of 5% per annum.

    The population of Coaltown is 108 000.

    The population of Coaltown is **decreasing** at a steady rate of 20% per annum.

    How many years will it take until the population of Newtown is greater than the population of Coaltown?                                    5

## 2004 P2

1. The average Scottish house price is £77 900.

   The average price is expected to rise by 2·5% per month. What will the average Scottish house price be in 3 months?

   Give your answer correct to three significant figures.                      3

## 2006 P2

1. The value of a boat decreased from £35 000 to £32 200 in one year.

   (a) What was the percentage decrease?                                       1

   (b) If the value of the boat continued to fall at this rate, what would its value be after a **further** 3 years?

      Give your answer to the nearest hundred pounds.                          3

## 2005 P2

1. In the evening, the temperature in a greenhouse drops by 4% per hour.

   At 8 pm the temperature is 28° Celsius.

   What will the temperature be at 11 pm?                                      3

## 2007 P2

*Marks*

**F**

1. Ian's annual salary is £28 400. His boss tells him that his salary will increase by 2·3% per annum.
   What will Ian's annual salary be after 3 years?
   Give your answer to the nearest pound.

3

## 2008 P2

**G**

1. Calculate the **compound interest** earned when £50 000 is invested for 4 years at 4·5% per annum.
   Give your answer to the nearest penny.

4