# PERCENTAGES (FOUNDATION) 

[ESTIMATED TIME: 75 minutes]
1.

Students in Year 11 took a maths test.
The maximum mark in the test was 75 .
(a) Melissa scored 48 marks.

Express 48 as a percentage of 75
(b) Ciaran scored $76 \%$.

Work out $76 \%$ of 75 marks.
(c) $56 \%$ of the students who took the test were girls.

There were 126 girls that took the test.
Work out the total number of students that took the test.

Paul got 68 out of 80 in a science test.
(a) Work out 68 out of 80 as a percentage.

Paul got 72 marks in a maths test.
72 is $60 \%$ of the total number of marks.
(b) Work out the total number of marks.
3.

Jade has tax deducted from her income at the rate of $24 \%$.
Last month, after tax had been deducted, $\$ 1786$ of her income remained.
Calculate her income last month before the tax was deducted.
$\qquad$

In a sale, normal prices were reduced by $35 \%$.
(a) The normal price of a camera was $£ 180$ Work out the sale price of the camera.
£ $\qquad$
(3)
(b) The normal price of a clock was reduced by $£ 84$ Work out the normal price of the clock.
£ $\qquad$
(3)
(c) The sale price of a computer was $£ 442$ Work out the normal price of the computer.
$\qquad$
(3)

Ella invested $\$ 8000$ for 3 years at $5 \%$ per annum compound interest.
Calculate the value of her investment at the end of 3 years.
$\qquad$
6.

In a sale, normal prices are reduced by $8 \%$
(a) The normal price of a jacket is $£ 28$

Work out the price of the jacket in the sale.
$\qquad$
(b) In the sale, the price of a shirt decreases by $£ 3$

Work out the normal price of the shirt.

In July 2002, the population of Egypt was 69 million.
By July 2003, the population of Egypt had increased by 2\%.
Work out the population of Egypt in July 2003.
$\qquad$
million
8.

Lisa sees a dress in a sale.
The normal price of the dress is $\$ 45$
The price of the dress is reduced by $12 \%$ in the sale.
(a) Work out the price of the dress in the sale.

Lisa's weekly pay increases from \$525 to \$546
(b) Calculate her percentage pay increase.
$\qquad$

Eloy's height was 125 cm when his age was 7 years.
His height was 153 cm when his age was 12 years.
(a) Work out the percentage increase in Eloy's height between the ages of 7 and 12 years.

Eloy's height at the age of 12 years was $85 \%$ of his height at the age of 20 years.
(b) Work out Eloy's height when his age was 20 years.

An electronics store had a sale in which it reduced all its prices by $24 \%$.
(a) Tom bought a television which had been reduced by $\$ 85$

Work out how much Tom paid for the television.
(b) Michael paid $\$ 140$ for a DAB radio.

Work out the original price of the radio, before the sale.
(c) Alec bought a laptop, which was originally priced at $\$ 380$

Work out the sale price for the laptop.

Maddie invested $\$ 3000$ for 4 years at $2.5 \%$ per annum compound interest.
(a) Calculate the amount of the investment at the end of 4 years.

$$
\$
$$

$\qquad$
(b) Work out the amount of interest that Maddie earned in these 4 years.

$$
\$
$$

$\qquad$

Pardeep invests a sum of money at an interest rate of $3 \%$ per year.
At the end of one year, the interest he receives is $\$ 372$
(c) Work out the value of Pardeep's investment at the end of one year.
$\qquad$

Cara's salary was increased from \$28250 to \$29832
(a) Work out the percentage increase in Cara's salary.
$\qquad$

Pedro's salary was increased by $5.2 \%$.
After the increase, his salary was $\$ 28141$
(b) Work out his salary before the increase.
$\qquad$

Jomo invested an amount of money at $4 \%$ per annum compound interest.
At the end of 2 years, the value of his investment was $£ 3380$
How much of the $£ 3380$ was interest?
$\qquad$

Serena bought a car that had a value of $\$ 16000$
At the end of each year, the value of her car had depreciated by $15 \%$.
Calculate the value of her car at the end of 3 years.
15.

The population of India increased by $20 \%$ between 1989 and 1999.
The population of India increased by a further 17\% between 1999 and 2009.
Calculate the percentage by which the population of India increased between 1989 and 2009.

