Percentages

Question Paper

Course	Edexcel IGCSE Maths
Section	1. Numbers & the Number System
Topic	Percentages
Difficulty	Easy

Time allowed: 50

Score: /40

Percentage: /100

Question 1

Bill's weight decreases from 64.8 kg to 59.3 kg.

Calculate the percentage decrease in Bill's weight.
Give your answer correct to 3 significant figures.

[3 marks]

Question 2

Ria is going to buy a caravan.

The total cost of the caravan is £7000 **plus** VAT at 20%.

Ria pays a deposit of £3000
She pays the rest of the total cost in 6 equal monthly payments.

Work out the amount of each monthly payment.

[4 marks]

Question 3

Tom is a ski jumper.

The maximum length of skis he can use is 145% of his height.
Tom's height is 1.80 m.

Work out the maximum length of skis Tom can use.

[3 marks]

Question 4

George wants to watch all 23 games that a football team will play at home next season.

He can buy

      a season ticket costing £425
      or 23 separate tickets costing £24 each ticket.

What percentage of the total cost of 23 separate tickets does George save by buying a season ticket?

[3 marks]

Question 5

At time $t = 0$ hours a tank is full of water.

Water leaks from the tank.
At the end of every hour there is 2% less water in the tank than at the start of the hour.

The volume of water, in litres, in the tank at time t hours is V_t

Given that

$V_o = 2000$
$V_{t+1} = kV_t$

write down the value of k.

[1 mark]

Question 6

Emily buys a pack of 12 bottles of water.
The pack costs £5.64

Emily sells all 12 bottles for 50p each.

Work out Emily's percentage profit.
Give your answer correct to 1 decimal place.

[3 marks]

Question 7

Gladys buys a table for $465 to sell in her shop.

She sells the table for $520

Work out the percentage profit that Gladys makes from the sale of the table.

Give your answer correct to 3 significant figures.

....%

[3 marks]

Question 8

In 2018, the population of Sydney was 5.48 million.
This was 22% of the total population of Australia.

Work out the total population of Australia in 2018
Give your answer correct to 3 significant figures.

.... million

[3 marks]

Question 9

Victor buys 12 bottles of apple juice for a total cost of $21
Victor sells all 12 bottles at $2.45 each bottle.

Work out Victor's percentage profit.

....%

[3 marks]

Question 10

Lijuan's salary is 180000 Hong Kong Dollars (HK$).
She gets a salary increase of 3%

Work out Lijuan's salary after this increase.

HK$ ....

[3 marks]

Question 11

Work out 320 as a percentage of 80

Circle your answer.

25%   75%   300%   400%

[1 mark]

Question 12

Work out 40 as a percentage of 10

Circle your answer.

4%   25%   300%   400%

[1 mark]

Question 13

The table shows information about the population of a city.

Population in 2001	Population in 2011
420 000	480 000

Liam claims,

"From 2011 to 2021 the population of the city will increase by the same percentage as from 2001 to 2011"

He works out,

population increase from 2001 to 2011 = 480 000 – 420 000

= 60 000

population in 2021 = 480 000 + 60 000

= 540 000

Does the population of 540 000 match his claim?
You **must** show your working.

[3 marks]

Question 14

In 1999 the minimum wage for adults was £3.60 per hour.

In 2013 it was £6.31 per hour.

Work out the percentage increase in the minimum wage.

[3 marks]

Question 15

Ed has a card shop.

Ed's profit on "Good Luck" cards in 2018 was £360.
This was a decrease of 20% on his profit in 2017.

Work out Ed's profit on "Good Luck" cards in 2017.

£ ....

[3 marks]