Multiple-choice section – choose the correct answer

Question 1 [2.1]

The fraction  written as a decimal is:

A 2.19 B 2.91 C 2.1 D 

Question 2 [2.1]

The decimal 8.85 written as a fraction is:

A  B  C  D 

Question 3 [2.2]

 written as a decimal is:

A 0.4311 B  C  D 

Question 4 [2.3]



A  B  C  D 

Question 5 [2.4]

This is a water jug with evenly spaced marks on the side.



It appears to be:

A about 45% full B about 42% empty

C about 50% empty D about 36% full

Question 6 [2.5]

The fraction  as a percentage is:

A 413% B 431% C 433% D 

Question 7 [2.5]

The decimal as a percentage is:

A % B % C 285% D %

Question 8 [2.6]

The percentage % written as a decimal is:

A  B  C  D 

Question 9 [2.6]

The percentage 3850% written as a fraction is:

A  B  C  D 

Question 10 [2.7]

25 seconds out of 2 minutes is:

A 20.8% B 20.83% C % D %

Question 11 [2.8]

37% of $565.20 (rounded to 2 decimal places) is:

A $209.12 B $209.10 C $20.90 D $20.95

Question 12 [2.9]

When $1500 is increased by 28.2% it becomes:

A 1528.20 B $1923 C $1900 D $1282

Multiple-choice results: \_\_\_ / 12

Short answer section

Question 13 4 marks [2.1]

Write the number  as a:

(a) decimal (b) percentage.

Question 14 6 marks [2.2]

Write the following decimals as fractions.

(a)  (b) 

Question 15 6 marks [2.2]

Use a calculator to write the following as decimals and classify them as terminating, recurring or irrational.

(a)  (b)  (c) 

Question 16 6 marks [2.3]

List the numbers from smallest to largest.

(a) , , , ,  (b) -2.05, -2.2, 2.5, -2, 2.09, -2.19

Question 17 6 marks [2.3]

Write the following in simplest form:

(a)  (b)  (c) -2.142 – 5.002

Question 18 4 marks [2.5]

Write the following as percentages.

(a) 9.006 (b) 0.007

Question 19 4 marks [2.6]

Write the following as decimals.

(a) 23.002% (b) 0.0004%

Question 20 4 marks [2.6]

Write the following as fractions.

(a) 2150% (b) 10.85%

Question 21 4 marks [2.7]

A trader bought goods for $45 000 and later sold the goods for $63 000.

(a) What profit did she make?

(b) What was the percentage profit?

Question 22 4 marks [2.8]

In a survey it was found that 32.5% of the people living in a suburb have their milk delivered. There are 36 000 people living in the suburb.

(a) How many people have milk delivered?

(b) How many people don’t have milk delivered?

Question 23 2 marks [2.9]

The profit made by a store is $125 000 and this is expected to increase by 12.5% over one year. Find the expected revenue of store after the year has passed.

Question 24 4 marks [2.9]

A luxury car worth $600 000 is damaged by a storm. The car dealer decides to sell it at a discount. Find the:

(a) amount that the car is reduced by

(b) new, reduced selling price of the car.

Question 25 4 marks [2.10]

The marked price of a jacket is $280 and it is sold at a discount of 35%.

(a) Find the amount of discount offered on the jacket.

(b) What is the selling price of the jacket?

Short answer results: \_\_\_ / 58

Extended answer section

Question 26 6 marks [2.1]

While shopping for paint online, Dave saw an offer of 22 litres of paint at a cost of $11.50 per litre.

(a) How much will the paint cost?

(b) There was another offer of 25 litres of paint for $275. How much will this paint cost per litre?

(c) Which is the better buy? Give reasons for your answer.

Question 27 7 marks [2.2]

Sam the snail is entered into a -metre snail race. In the first 20 minutes he travelled  of the race distance. In the next 20 minutes he travelled of the race distance and in the 20 minutes after that, he travelled  of the race distance.

(a) Calculate the distance Sam travelled in each 20-minute period.

(b) How far did Sam have to travel to the finish line after the end of the third 20-minute period?

(c) Write the distance that Sam needs to travel to finish the race at the end of the third 20-minute period as a fraction of:

(i) the length of the race

(ii) the total distance travelled.

Question 28 4 marks [2.5]

The test scores achieved in four areas by a student are shown below. The decimal was found by dividing the actual mark by the total mark.

AREA SCORE

Spelling 0.955

Punctuation 0.75

Reading 0.75

Writing 0.925

(a) What is the student’s percentage score in Spelling?

(b) What is the student’s percentage score in Writing?

(c) What is the percentage difference between the average of the Spelling and the Writing scores and the average of the Punctuation and the Reading scores?

Question 29 4 marks [2.8]

(a) In a group of Year 5 students, some walk to school and some don’t. If on average 3 students walk to school for every 2 who do not walk to school, what percentage of the group do not walk to school?

(b) If there are 60 students in the group then how many students walk to school?

(c) Of the Year 6 students, 10 students walk to school out of 44 students. What percentage is this?

(d) When the Year 5 and Year 6 students are put together, what percentage of the students walk to school? Give your answer expressed as a fraction.

(e) The school has a total of 480 students. It is expected that this will grow to 520 students by next year. What is the percentage increase of the school population expressed as a fraction?

Question 30 7 marks [2.10]

A holiday cruise has a price of $2470.

(a) A 5% discount is offered to members of a club. What is the price of the cruise for them?

(b) Last year, the price of same cruise was $2100. What is the percentage increase in the price of the cruise from last year?

(c) Next year, the price will rise by 10%. What will be the price then?

(d) In a booking of 60 people, 15% were under 20 years old, 65% were adults and the rest were pensioners. People under 20 years old pay half the full price, adults pay full price and pensioners pay one quarter the full price. How much was the admission price for the group this year?

Extended answer results: \_\_\_ / 28

TOTAL test results: \_\_\_ / 98