Multiple-choice section – choose the correct answer

Question 1 [2.1]

The fraction  written as a decimal is:

A 2.15 B 2.51 C 2.05 D 2.2

Question 2 [2.1]

The decimal 0.85 written as a fraction is:

A  B  C  D 

Question 3 [2.2]

 written as a decimal is:

A 0.311 B 3.11 C 0.27 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 50% empty B about 60% empty

C about 40% full D about 30% full

Question 6 [2.5]

The fraction  as a percentage is:

A 13% B 31% C 33% D 

Question 7 [2.5]

The decimal 2.85 as a percentage is:

A 2.85% B 248.5% C 285% D 2850%

Question 8 [2.6]

The percentage 55% written as a decimal is:

A 5.5 B 0.55 C 0.055 D 0.0055

Question 9 [2.6]

The percentage 320% written as a fraction is:

A  B  C  D 

Question 10 [2.7]

15 seconds out of 2 minutes is:

A 152% B 1.25% C 12.5% D 125%

Question 11 [2.8]

30% of $560 is:

A $1680 B $168 C $16.80 D $1.69

Question 12 [2.9]

When $1500 is increased by 20% it becomes:

A $1650 B $1800 C $1520 D $300

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) -2.5, -1.2, -0.5, -3.6, -8.9

Question 17 6 marks [2.3]

Write the following in simplest form:

(a)  (b) 

(c) -2.142 – 5.2

Question 18 4 marks [2.5]

Write the following as percentages.

(a) 9.06 (b) 0.007

Question 19 4 marks [2.6]

Write the following as decimals.

(a) 23% (b) 62.4%

Question 20 4 marks [2.6]

Write the following as fractions.

(a) 215% (b) 10.8%

Question 21 4 marks [2.7]

James bought shares in a company for $15 000. After six months, he sold the shares for $18 000.

(a) What profit did he make?

(b) What was the percentage profit?

Question 22 4 marks [2.8]

Fifty-five per cent 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]

Lucy bought shares at value of $8000. One month later, the share price had increased by 6%. Calculate the new value of shares.

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 30% 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]

A bookshop marks all its goods up by 10% to make a profit.  
Find the selling price of:

(a) a dictionary with a cost price of $40

(b) a set of books with a cost price of $85.

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

Extended answer section

Question 26 7 marks [2.1]

Lucinda buys 2.4 metres of material that is priced at $6.99 per metre.

(a) How much does the material cost?

(b) If Lucinda pays cash for the material, how much does she pay?

(c) A similar material is $80 for a roll of 15 metres. How much does this material cost per metre?

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

(e) At the original price, how much of the original material could Lucinda buy for $60?

Question 27 7 marks [2.2]

Amy entered a boat-rowing race that is 2000 m long. In the first 2 minutes she travelled  of the race distance. In the next 2 minutes she travelled of the race distance and in the 2 minutes after that, she travelled  of the race distance.

(a) Calculate the distance Amy travelled in each 2-minute period.

(b) How far did Amy have to travel to the finish line after the end of the third 2-minute period?

(c) Write the distance that Amy needs to travel to finish the race at the end of the third 2-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 0.755

Punctuation 0.8

Reading 0.85

Writing 0.825

(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 Spelling and Writing scores?

Question 29 4 marks [2.8]

In a group of Year 8 students, 64% of the students choose to do music lessons.

(a) What percentage of the students did not choose to do music lessons?

(b) If there are 50 students in the group then how many students choose to do music lessons?

Question 30 7 marks [2.10]

A holiday package has a price of $6500.

(a) What is the price of the holiday package if a 5% discount is offered?

(b) Last year, the price of same holiday package was $6000. What is the percentage increase?

(c) Next year, the price will rise by 5%. What will be the price then?

Extended answer results: \_\_\_ / 29

TOTAL test results: \_\_\_ / 99