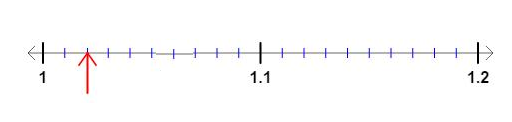
Multiple-choice section

Question 1 [4.1]

The missing number in the equation 0.36 = is:

A 36 B 3.6 C 2 D 3

Question 2 [4.1]



The arrow points to the number:

A 0.2 B 1.2 C 1.02 D 1.12

Question 3 [4.3]

 when rounded to 2 decimal places is:

A 0.23 B 0.67 C 0.66 D 0.7

Question 4 [4.2]

Which of the following cannot be rounded to 4.24? 

A 4.242 B 4.238  C 4.235 D 4.245

Question 5 [4.3]

7.2 as a fraction in simplest form is:

A  B  C  D 

Question 6 [4.4]

Which of these calculations gives an answer closest to 1?

A 1.4 – 0.39 B 0.59 + 0.31 C 1.4 – 0.5 D 0.26 + 0.72

Question 7 [4.5]

Calculate: 3.2 × 0.2

A 6.4 B 0.64 C 1.6 D 16

Question 8 [4.7]

0.32 written as a percentage is:

A  B 32% C 3.2% D 

Question 9 [4.8]

Which of the following calculations will find 60% of $40?

A  B  C  D 

Question 10 [4.8]

Jon has collected 3 of the 12 figures in a set. What percentage does he need to complete the set?

A 6.24% B 24% C 25% D 75%

Question 11 [4.9]

Sam has six birds, two dogs and three cats as pets. What is the ratio of dogs to birds?

A 6 : 2 B 1 : 3 C 2 : 3 D 3 : 2

Question 12 [4.10]

If 40 dogs eat 30 kg of mince, how much mince would 24 dogs eat?

A 18 kg B 15.6 kg C 15 kg D 3 kg

Multiple-choice total marks: \_\_\_\_ / 12

Short answer section

Question 13 3 marks [4.3, 4.4, 4.7]

Use words from the list below to complete the following sentences.

*add divide multiply recurring ratio subtract rate terminating*

(a) To change a percentage to a decimal, you \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ by 100.

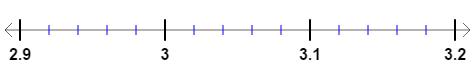
(b) A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ decimal is one that does not have a repeating pattern of digits.

(c) The decimal point must be aligned when you \_\_\_\_\_\_\_\_\_\_\_\_\_ two decimal numbers.

Question 14 3 marks [4.1]

On the number line below draw arrows to show the positions of:

(a) 3.2 (b) 2.94 (c) 3.05



Question 15 2 marks [4.1]

Write the following as decimals.

(a) 2 tens, 3 hundredths and 4 thousandths

(b) 

Question 16 3 marks [4.1]

Write a greater than (>) or less than (<) symbol to make each of the following statements true.

(a) 302 \_\_\_\_\_\_ 30.2

(b) 0.0456 \_\_\_\_\_\_ 0.04056

(c) 3.05639 \_\_\_\_\_\_\_ 3.0653

Question 17 2 marks [4.1]

Write the following in ascending order.

|  |  |
| --- | --- |
| (a) 67.32, 67.032, 6.732 | (b) 0.089 450, 0.080 945, 0.008 945 |

Question 18 3 marks [4.2, 4.4]

Ethan bought a packet of chips for $1.86 and paid in cash.

(a) How much would he actually have to pay for the chips?

(b) How much change would he get from $5?

Question 19 3 marks [4.2]

Round the following to the number of decimal places indicated in the brackets.

(a) 63.732 (1) (b) 1.3789 (3) (c) 0.8998 (2)

Question 20 7 marks [4.7]

Complete the table.

|  |  |  |
| --- | --- | --- |
| Fraction | Decimal | Percentage |
|  | 0.5 | 50% |
|  | 0.1 |  |
|  | 0.25 |  |
|  |  |  |
|  |  | 12% |
|  |  |  |
|  | 0.666… |  |
|  |  | 5% |

Question 21 2 marks [4.3]

Write the following using recurring decimal notation.

(a) 0.666… (b) 3.787 878…

Question 22 4 marks [4.4]

Calculate the following.

(a) 3 + 21.4 + 0.236 (b) 4.64 + 0.466

Question 23 4 marks [4.4]

Calculate the following.

(a) 2.735 – 0.633 (b) 14.7 – 0.752

Question 24 3 marks [4.5]

Calculate the following.

(a) 23.8 × 1000 (b) 0.56 × 6 (c) 45.4 × 400

Question 25 4 marks [4.5]

Calculate the following.

(a) 0.7 × 0.6 (b) 0.83 × 0.02

Question 26 6 marks [4.6]

Calculate the following.

(a) 7.95 ÷ 10 00 (b) 8.1 ÷ 9 (c) 0.124 ÷ 8

Question 27 4 marks [4.6]

Calculate the following

(a) 8.4 ÷ 60 (b) 4.9 ÷ 0.07

Question 28 4 marks [4.8]

(a) Find 5% of 220. (b) Find 9% of 75.

Question 29 2 marks [4.8]

Kelly received 45 marks out of 60 in her spelling test. What percentage was this?

Question 30 4 marks [4.9]

Complete the equivalent ratios.

|  |  |
| --- | --- |
| (a) 4 : 5  = 16 : \_\_\_  = \_\_\_ : 10 | (b) 2 : 4 : 5  = \_\_\_ : 20 : \_\_\_ |

Question 31 4 marks [4.10]

(a) If it costs $6400 to pave a courtyard that has an area of 80 square metres, how much does it cost to pave a courtyard that is 16 square metres in area?

(b) If it takes 3 minutes to fill an 8 L bucket, how long will it take to fill a 2 L bucket? Write your answer in seconds.

Short answer total: \_\_\_\_\_\_\_\_\_ / 67

Extended answer section

Question 32 9 marks [4.4, 4.5, 4.6, 4.8, 4.9]

(a) Jemma is a 100 m hurdler. In her last three races her times have been 16.32 seconds, 16.09 seconds and 16.37 seconds. If her fourth race was 0.23 seconds faster than her fastest time, what was her time for the race?

(b) Jemma’s coach wanted to calculate Jemma’s average time for her past four races, so he added up the times and divided by 4. What was the average time he calculated?

(c) As part of her training, Jemma needs to eat 11 500 kilojoules daily, which is broken up into serves. She is to have three serves for breakfast, one serve for morning tea, two serves for lunch and one serve each for afternoon tea and dinner. How many kilojoules should Jemma eat at breakfast?

(d) What is the ratio of Jemma’s breakfast intake to her dinner intake? Write your answer in simplest form.

(e) On days that Jemma does not train, she has 65% of the kilojoule intake for training days. What is her daily kilojoule intake on these days?

Question 33 9 marks [4.5, 4.6, 4.7]

Jamie looked up a recipe for a pastry and was given the following ingredients:

80 g water 50 g flour

40 g butter 130 g eggs (2 eggs, 65 g each)

(a) What is the ratio (in simplest form) of flour to butter?

(b) What fraction of the ingredients is flour?

(c) Jamie decided to use 75 g of flour. How much butter and water should he use?

(d) Jamie went to the supermarket and saw the following unit pricing:

100 g flour $0.24 100 g butter $0.70

12 eggs (65 g each) $4.80 100 g pastry (ready-made) $0.80

(i) Choose a quantity of pastry to make and calculate how much Jamie would save by buying the flour, butter and eggs and making it himself instead of buying the pastry ready-made.

(ii) What is the saving as a percentage of the ready made pastry cost?

Extended answer total: \_\_\_\_\_\_\_\_\_ / 18

TOTAL test marks: \_\_\_\_\_\_\_ / 97