

## Year 5 Term 4 Test

<b>Student Name:</b> _____	<b>Grade:</b> _____
<b>Date:</b> _____	<b>Score:</b> _____

- Answer the questions in the spaces provided on the question sheets.
- If you run out of room for an answer, continue on the back of the page.
- This test has 37 questions, for a total of 100 marks.
- Do not use a calculator.
- Attempt all 37 questions.
- Time allowed: 60 minutes.

Page:	1	2	3	4	5	6	7	8	Total
Marks:	20	10	10	12	14	10	10	14	100
Score:									

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**Questions 1 through 10 are multiple choice questions.(2 marks each)**

Question 1.....(2 marks)

Which one of the following operations with integers will not always give an answer as a whole number?

- A. Addition      B. Subtraction      C. Multiplication      D. Division

Question 2.....(2 marks)

What is the missing number in this series? 21, 25, 39  97

- A. 43      B. 54      C. 63      D. 75

Question 3.....(2 marks)

To paint a fence, 500 mL of paint is needed for every  $2 m^2$ . How much paint, in litres, will be needed to cover a fence which measures 25m by 1.8 m?

- A. 12.5 L      B. 11.5 L      C. 10.25 L      D. 11.25L

Question 4.....(2 marks)

A car covers 8 km in 5 minutes. At this rate, how long would it take to travel 280 km?

- A. 175 minutes      B. 35 minutes      C. 56 minutes      D. None of these

Question 5.....(2 marks)

A school consists of 750 students of which 420 are girls. What is the percentage of boys in the school?

- A. 44%      B. 46%      C. 56%      D. 42%

Question 6.....(2 marks)

Express 24 minutes as a ratio of 2 hours 36 minutes.

- A. 1 : 6      B. 1 : 7      C. 2 : 13      D. 2 : 15

Question 7.....(2 marks)

A car travels 78 km in 45 minutes. What is its average speed in km/h?

- A. 104 km/h      B. 117 km/h      C. 102 km/h      D. 98 km/h

Question 8.....(2 marks)

38 tens more than \_\_\_\_\_ is equal to 38 hundreds. What is the missing number?

- A. 4180      B. 760      C. 3838      D. 3420

Question 9.....(2 marks)

John donates \$1200 to the charity which is 12% of his yearly salary. What is John's salary?

- A. \$12000      B. \$10000      C. \$14000      D. None of these

Question 10.....(2 marks)

Two numbers have a difference of 12 and their average is 19. What is the smaller number?

- A. 15      B. 17      C. 25      D. 13

Question 11 ..... (2 marks)

Mike and Tony shared \$108. Mike received \$16 more than Tony. Find the ratio of Mike's share to Tony's share.

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Question 12 ..... (2 marks)

The sum of the first 20 multiples of 2 is:  $2 + 4 + 6 + 8 + \dots + 40$ .

The sum of the first 20 multiples of 3 is:  $3 + 6 + 9 + 12 + \dots + 60$ .

Find the difference of the two sums.

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Question 13 ..... (4 marks)

A car travels 5.5 km on 500mL of petrol.

(a) What is the distance travelled on 65 L of petrol? [2]

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(b) What is the cost of petrol to travel 572 km if petrol costs \$1.25 per litre? [2]

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Question 14 ..... (2 marks)

A bag of sweets contain 12 mints, 6 toffees and 6 boiled fruits. They are all the same size and shape and are wrapped in foil. You are asked to take one sweet out of the bag with your eyes closed. What is the probability that it is not a toffee?

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Question 15 ..... (4 marks)

A cyclist travels 100 km on the first day of the week. Every day the cyclist increases the distance by 50%. So on the second day the cyclist travels 150 km and so on.

(a) How far does the cyclist travel on the fifth day? [2]

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(b) How many kilometres does the cyclist travel in these five days? [2]

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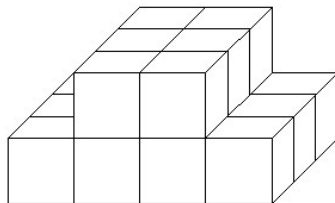
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Question 16 ..... (6 marks)

This solid is made of white cubes.



(a) How many white cubes were used to make this solid? [2]

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(b) If the solid is dipped in red paint, count the number of cubes:

i. How many cubes have three faces painted red? [2]

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ii. How many cubes have two faces painted red? [2]

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Question 17 ..... (4 marks)

A batch of 300 products on an assembly line are graded in terms of quality as A, B, C, D and Reject. One-third of the products are graded A, One-quarter of the products are graded B, One-fifth are graded C and one-sixth are graded D.

(a) How many products are graded C? [2]

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(b) How many products are rejected? [2]

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Question 18 ..... (2 marks)

These is a easy way to work out the total of a set of counting numbers starting from one without having to add them all up one by one. You simply multiply half the number by the number itself, then add half the number again. What is the sum of the first two hundred counting numbers?

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Question 19 ..... (6 marks)

In a 400 m race, Adam is faster than Bob and David. Chris is faster than David and Adam. David is faster than Bob.

(a) Who is the fastest? [2]

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(b) Who is the slowest? [2]

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(c) Who is the second last? [2]

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Question 20 ..... (2 marks)

The length of a rectangle is three cm more than three times its width. If its perimeter is 54 cm, what is its area?

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Question 21 ..... (2 marks)

In a topic test, a group of five students had an average score of 82 while another group of 10 students has an average of 70. What is the average of the 15 students altogether?

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Question 22 ..... (10 marks)

A 4 cm wooden cube is painted red on all surfaces. Imagine that it is cut into 1 cm cubes.

(a) How many 1 cm cubes can be cut? [2]

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(b) How many cubes have paint on three faces? [2]

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(c) How many cubes have paint on two faces? [2]

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(d) How many cubes have paint on only one face? [2]

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(e) How many cubes are not painted at all? [2]

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Question 23 ..... (2 marks)

Find the LCM of 56 and 48.

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Question 24 ..... (2 marks)

Find the HCF of 56, 48 and 128.

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Question 25 ..... (2 marks)

In the five-digit number A2A4A, each of the As represents the same digit and A2A4A is divisible by 9. What digit does A represent?

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Question 26 ..... (2 marks)

A square is divided into three congruent rectangles. Each of the three rectangles has a perimeter of 32 cm. Find the area of the square.

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Question 27 ..... (2 marks)

If the sum of five consecutive odd numbers is 455, what is the difference of the smallest and the largest of the five numbers?

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Question 28 ..... (2 marks)

How many different four-letter code words can you make using the letters A, B, C and D if repetition is not permitted?

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Question 29 ..... (2 marks)

Find the value of  $2\frac{1}{3} \div 1\frac{3}{4} \times \frac{1}{4}$ .

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Question 30 ..... (2 marks)

Ken had a 9:30 a.m appointment that was 30 km from his home. He drove from his home at an average speed of 50 km/h and arrived 12 minutes late. At what time did Ken leave home for the appointment?

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Question 31 ..... (2 marks)

A jar contains 6 orange, 8 purple and 12 red marbles. A marble is drawn at random. What is the probability of drawing an orange marble or a purple marble?

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Question 32 ..... (2 marks)

Suppose you enter an elevator at a certain floor. Then the elevator moves up 7 floors, down 5 floors, and up 3 floors. You are then at floor 12. At which floor did you initially enter the elevator?

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Question 33 ..... (2 marks)

If \$4248 is shared equally among 18 people. Find the amount of money received by 2 people.

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Question 34 ..... (2 marks)

A water tank 6 m by 5 m by 3.6 m is  $\frac{5}{6}$  filled. How much more water can the tank hold?

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Question 35 ..... (2 marks)

The perimeter of a rectangle is 108 cm. The ratio of its length to its width is 7 : 2. What is the area of the rectangle in  $cm^2$  ?

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Question 36 ..... (4 marks)

There are 32 students in Keith's class. All the students study math. The number of students who passed the first math test this year was 25. The number who passed the second math test was 28. If 23 students passed both tests, how many students failed both tests?

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Question 37 ..... (4 marks)

Two robots run around a circular track 400 m long. One robot runs at a steady rate of 20 m per second, the other at a steady rate of 25 m per second. Suppose they start at the same point and the same time. What is the least number of seconds that will elapse before they are again together at the starting point?

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