Year 5 Term 1 Test Solutions

Student Name: _____	**Grade**: _____
Date: _____	**Score**: _____

- 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 45 questions, for a total of 100 marks.
- Do not use a calculator.
- Attempt all 45 questions.
- Time allowed: 60 minutes.

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

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1 Year 5 Term 1 Test Answers

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

Question 1 ..... (2 marks)

CMXLV in Hindu-arabic is:

A. 1954 **B. 945** C. 954 D. 995

Question 2 ..... (2 marks)

1892 in Roman numeral is:

A. MCMLXXXII B. MDCCLXXXIIV C. MCMXCII **D. MDCCCXCII**

Question 3 ..... (2 marks)

Round off 65435 to the nearest hundred is:

A. 65400 B. 65430 C. 65500 D. 65440

Question 4 ..... (2 marks)

Which one is the largest?

A. 0.52 B. $\frac{1}{2}$ C. 45% **D.** $\frac{4}{7}$

Question 5 ..... (2 marks)

How many surfaces do a rectangular prism and a triangular prism have altogether?

A. 8 B. 9 C. 10 **D. 11**

Question 6 ..... (2 marks)

The sum of three consecutive numbers is 84. What is the largest number?

A. 26 B. 27 C. 28 **D. 29**

Question 7 ..... (2 marks)

If $\frac{2}{5}$ of a number is 78, what is the number?

A. 195 B. 168 C. 130 D. 192

Question 8 ..... (2 marks)

I think of a number, square it, halve it, triple it and I am left with 384. What was the number I first thought of?

A. 16 B. 8 C. 4 D. 32

Question 9 ..... (2 marks)

Find the number which is halfway between 13.4 and 6.8.

A. 10.01 B. 9.01 **C. 10.1** D. 9.6

Question 10 ..... (2 marks)

Find the value of 0.055×10000.

A. 550 B. 5500 C. 55000 D. 55

Questions 11 through 20 are quick questions (2 marks each).

Question 11 . . . . . (2 marks)

Express 135% as an improper fraction in its simplest form.

11. $\frac{27}{20}$

Question 12 . . . . . (2 marks)

How many quarters are there in $7\frac{1}{4}$?

12. **29**

Question 13 . . . . . (2 marks)

Find 45% of \$260.

13. **\$117**

Question 14 . . . . . (2 marks)

How many times is 23456.7 bigger than 0.234567?

14. **100,000**

Question 15 . . . . . (2 marks)

Nine times a number diminished by 82 is 26. Find the number.

15. **12**

Question 16 . . . . . (2 marks)

Eight times a number increased by 9 is 121. Find the number.

16. **14**

Question 17 . . . . . (2 marks)

If a discount of 25% is given on an item selling for \$250, what is actually paid for the item?

17. **\$187.50**

Question 18 . . . . . (2 marks)

Express 2.0125 as a fraction in its lowest term.

18. $2\frac{1}{80}$

Question 19 . . . . . (2 marks)

Find the next number 4, 9, 14, 19, 24, 29, . . .

19. **34**

Question 20 . . . . . (2 marks)

Write the basic numeral for $4 \times 10^5 + 7 \times 10^4 + 9 \times 10^o$.

20. **470,009**

Questions 21 through 30 are average questions (2 marks each).

Question 21 . . . . . (2 marks)

Suppose yesterday was Friday. What day of the week will it be 100 days from now?

Solution: Monday.

Question 22 . . . . . (2 marks)

Find the value of $5 \times [(4 + 12) - 2 \times 6 \div 3]$

Solution: $5 \times [(4 + 12) - 2 \times 6 \div 3] = 5 \times (16 - 4) = 5 \times 12 = 60$.

Question 23 . . . . . (2 marks)

Raymond walks 35 metres in 20 seconds. If he walks at a constant speed, how far will he walk in one and a half hours?

Solution: 35 meters in 20 sec $\Rightarrow$ 105m/min, 1.5 hours = 90 mins
$90 \times 105 = 9450$ m or 9.45 km.

Question 24 . . . . . (2 marks)

Evaluate $144 \div 9 \times 4 - 48 \div 6 + 12$

Solution: $144 \div 9 \times 4 - 48 \div 6 + 12 = 64 - 8 + 12 = 68$.

Question 25 . . . . . (2 marks)

$1 \times 2 \times 3 \times 4 \times 5 \times 6 \div 5 \div 4 \div 3 \div 2 =$

Solution: $1 \times 2 \times 3 \times 4 \times 5 \times 6 \div 5 \div 4 \div 3 \div 2 = 720 \div 5 \div 4 \div 3 \div 2 = 6$

Question 26 . . . . . (2 marks)

The smaller of two numbers is 11 and their sum is 33. What is the difference between the two numbers?

Solution: $A + B = 33$ and $B = 11 \Rightarrow A = 33 - 11 = 22 \Rightarrow A - B = 22 - 11 = 11.$

Question 27 . . . . . (2 marks)

6 times the square of 6 is increased by the difference of 16 and 9.

Solution: $6 \times 6^2 + (16 - 9) = 6 \times 36 + 7 = 216 + 7 = 223.$

Question 28 . . . . . (2 marks)

A train leaves a station at 6:45 p.m. and arrives at its destination at 1:25 p.m. the next day. How long does it take for the journey?

Solution: 1:25 + 24:00 - 6:45 = 18:40 = 16 hrs and 40 min.

Question 29 . . . . . (2 marks)

There are 500 marbles in a bag. 110 are blue, 120 are red and the rest of them are yellow and green. What percentage of the total are yellow and green?

Solution: Green and yellow marbles $= 500 - (110 + 120) = 270$

$\frac{270}{500} \times 100\% = 54\%.$

Question 30 . . . . . (2 marks)

Jeffrey scored 76 out of 80. What percentage did he get?

Solution: $\frac{76}{80} \times 100\% = 95\%.$

Questions 31 through 40 are extension questions (2 marks each).

Question 31 ..... (2 marks)

What number added to itself equals to $\frac{1}{4}$?

Solution: $N + \frac{N}{2} = \frac{1}{4} \Rightarrow 4N + 2N = 1 \Rightarrow N = \frac{1}{6}$.

Question 32 ..... (2 marks)

Evaluate $(\frac{1}{2})^2 + (\frac{1}{3})^2 + (\frac{1}{4})^2$

Solution: $(\frac{1}{2})^2 + (\frac{1}{3})^2 + (\frac{1}{4})^2 = \frac{1}{4} + \frac{1}{9} + \frac{1}{16} = \frac{36}{144} + \frac{16}{144} + \frac{9}{144} = \frac{61}{144}$.

Question 33 ..... (2 marks)

A remote-control car uses 6 batteries every 5 hours. The batteries are sold in packs of 4. How many packs of batteries would be needed to run the car for 20 hours?

Solution: 20 hours need to use $20 \div 5 \times 6 = 24$ batteries
$24 \div 4 = 6$ packs.

Question 34 ..... (2 marks)

Eleven years ago Bob was 11 years old. How old will he be in 22 years time?

Solution: Bob is 11 + 11 = 22 years now
In 22 years time he will be 22 + 22 = 44 years old.

Question 35 ..... (2 marks)

If $X \triangle Y = (X \times 2 - Y \div 2) \times 2$, find $16 \triangle 6$.

Solution: $16 \triangle 6 = (16 \times 2 - 6 \div 2) \times 2 = (32 - 3) \times 2 = 58$.

Question 36 . . . . . (2 marks)

A rectangle has an area of 247 cm^2. Find the length if the breadth is 6 cm less than the length.

Solution: $L \times (L-6) = 247 \Rightarrow 19 \times (19-6) = 247$

L = 19 cm

Question 37 . . . . . (2 marks)

The average of 5 numbers is 9. A sixth number is added and the new average is 10. What is the sixth number?

Solution: Total of 5 numbers $= 5 \times 9 - 45$

Total of 6 numbers $= 6 \times 10 = 60$

So the sixth number is $60 - 45 = 15$.

Question 38 . . . . . (2 marks)

Find the LCM of 24, 36 and 56.

Solution: $\text{LCM}(24, 36, 56) = 504$.

Question 39 . . . . . (2 marks)

Find the HCF of 54 and 36.

Solution: $\text{HCF}(54, 36) = 18$.

Question 40 . . . . . (2 marks)

The ratio of mass of Ken and Ben is 7:9. If Ben is 12 kg heavier than Ken, find the total mass of the two boys.

Solution: $\begin{cases} 9+7=16 \\ 9-7=2 \end{cases}$ each unit = $12 \div 2 = 6$ kg.

The total mass of two boys = $16 \times 6 = 96$ kg.

Questions 41 through 45 are challenging questions (4 marks each).

Question 41 ..... (4 marks)

Cathy and Mary have 342 stamps altogether. If Cathy has $\frac{1}{4}$ more stamps than Mary, find the number of stamps Cathy has.

Solution: If Mary has 4 parts and Cathy will have 5 parts
The ratio of the stamps between Cathy and Mary is $C : M = 5 : 4$
$5 + 4 = 9, \Rightarrow 342 \div 9 = 38/unit \Rightarrow$ Cathy has $5 \times 38 = 190$ stamps.

Question 42 ..... (4 marks)

Ken has twice as much money as Ben. How much will Ken have to give Ben so that each of them will have \$84?

Solution: K:B = 2:1 $\Rightarrow$ K + B = $84 \times 2 = \$168$
Each unit =$168 \div 3 = \$56$ So Ken has $2 \times 56 = \$112$ and Ben has \$56
So Ken have to give Ben $112 - 84 = \$28$.

Question 43 ..... (4 marks)

240 sweets are shared among 4 children in the ratio 2 : 4 : 6 : 8. Find the difference of the the number of sweets between the greatest and the smallest shares.

Solution: $\begin{cases} \text{sum} = 2 + 4 + 6 + 8 = 20 \\ \text{difference} = 8 - 2 = 6 \end{cases} \Rightarrow 240 \div 20 \times 6 = 72$ sweets.

Question 44 ..... (4 marks)

60% of the spectators at a football match are men. 10% are girls, 15% are boys and the remaining 1200 spectators are women. Find the total number of spectators at the football match.

Solution: Women = $100\% - (60\% + 10\$ + 15\%) = 15\%, \Rightarrow 1200 \div 15 \times 100 = 8000$ spectators.

Question 45 ..... (4 marks)

Emma spends $\frac{2}{5}$ of her monthly income and saves \$650. What is her yearly income?

Solution: Saving is $1 - \frac{2}{5} = \frac{3}{5} \Rightarrow$ Yearly income $= 650 \div 3 \times 5 \times 12 = \$13,000$.