



Kungfu Math

Name: _____ Class: _____ Date: _____

Challenge: P5 Whole Numbers Challenge

Written Instructions:

For each Multiple Choice Question (MCQ), four options are given. One of them is the correct answer. Make your choice (1,2,3 or 4). Write your answers in the brackets provided..

For each Short Answer Question(SAQ) and Long Answer Question(LAQ), write your answers in the blanks provided.

Leave your answers in the simplest form or correct to two decimal places.

1) The cost of a holiday trip for a family of five is \$25000 when rounded off to the nearest \$1000. Which of the following could the actual cost be?

- 1) \$25499
- 2) \$24499
- 3) \$26505
- 4) \$24400

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2) In 7 632 577, what is the place value of the digit '6' ?

- 1) millions
- 2) hundred thousands
- 3) tens
- 4) ten thousands

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3) There were 438 chairs in the hall.
Rose removed 36 chairs and rearranged all of them into 3 rows.
Which number sentence below will give the number of chairs in each row?

- 1) $(438 - 36) \div 3$
- 2) $438 - (36) \div 3$
- 3) $438 \div 3 - 36$
- 4) $438 - (36 \div 3)$

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4) Andrew had a total of 16 chickens and goats on his farm.
Each chicken has 2 legs while each goat has 4 legs.
He counted a total of 44 legs.

How many chickens did he have on his farm?

- 1) 10
- 2) 96
- 3) 22
- 4) 6

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5) Which of the following numbers cannot be divided by 4 without any remainder?

- 1) 549
- 2) 232
- 3) 500
- 4) 548

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Write eighty thousand and forty in numerals.

Answer: _____

7) The sum of all the factors of 28 is the 8th multiple of a number.
What is the number?

Answer: _____

8) What is the smallest 3-digit even number that can be formed using the digits 5, 9, 6 and 3?

Answer: _____

9) Write 6 millions, 8 thousands, 6 hundreds and 3 ones in numbers.

Answer: _____

10) Solve the problem below.

$$132 \times 78 = (100 \times 78) + (40 \times 78) - (\text{ ____ } \times 78)$$

Answer:_____

11) Find the value of:

$$11 + 6 \times 3 \div 9 - 5$$

Answer:_____

12) Swathi had 110 more chocolates than Doria.

After Swathi had given away some, Doria would have 5 times as many chocolates as Swathi.
If Swathi had 435 chocolates at first, how many chocolates did Swathi give away?

Answer:_____

13) 2 books and 3 magazines cost \$80 in total.

The book costs \$5 more than the magazine.

How much does each book cost?

\$ ____

Answer:_____

14) There are 11 children. 8 of them can cycle and 6 of them wear glasses.

4 of them do not wear glasses but can cycle.

How many children wear glasses and can cycle?

Answer:_____

15) Round off 24868 to the nearest hundred.

Answer:_____

16) Janice, Christina and Jill visit the library regularly.
Janice visits the library every 4 days.
Christina visits every 9 days while Jill visits every 8 days.
If they met each other today, how many days later will they meet again?

Answer:_____

17) Joanna has some 5-cent and 10-cent coins. The coins add up to 100 cents. There are 2 more 5-cent coins than 10-cent coins. How many 5-cent coins than 10-cent coins.

How many 5-cent coins and 10-cent coins has Joanna got?

five-cent coins

ten-cent coins

Answer:_____

18) There were a total of 385 apples in three boxes.

When 42 apples were moved from Box A to Box B, and 35 apples were moved from Box B to Box C,

there were thrice as many apples in Box A as Box B and 49 more apples in Box C than Box A.

How many apples were there in Box B at first?

Answer:_____

19) Five dolls and three doll houses cost \$192.00.

Five dolls and six doll houses cost \$204.00.

What is the cost of a doll?

\$ ____

Answer:_____

20) Trees were planted along each side of a triangular shaped garden such that an equal number of trees were found along each side of the garden. There is a tree planted at each corner of the triangular shaped garden.

If there were 153 trees planted, how many trees were there along each side of the garden?

Answer:_____

1) The cost of a holiday trip for a family of five is \$25000 when rounded off to the nearest \$1000. Which of the following could the actual cost be?

- 1) \$26505
- 2) \$25499
- 3) \$24499
- 4) \$24400

Answer: 2

SOLUTION 1 :

Hint: In \$25499, the digit '4' is less than 5. Hence, we round down the number.

\$25499 is \$25000 when rounded off to the nearest \$1000.

2) In 7 632 577, what is the place value of the digit '6' ?

- 1) tens
- 2) ten thousands
- 3) hundred thousands
- 4) millions

Answer: 3

SOLUTION 1 :

7	6	3	2	5	7	7
Millions	Hundred	Ten	Thousands	Hundreds	Tens	Ones
	thousands	thousands				

The place value of the digit '6' is **hundred thousands**.

3) There were 438 chairs in the hall.
Rose removed 36 chairs and rearranged all of them into 3 rows.
Which number sentence below will give the number of chairs in each row?

- 1) $438 \div 3 - 36$
- 2) $438 - (36 \div 3)$
- 3) $(438 - 36) \div 3$
- 4) $438 - (36) \div 3$

Answer: 3

4) Andrew had a total of 16 chickens and goats on his farm. Each chicken has 2 legs while each goat has 4 legs. He counted a total of 44 legs.

How many chickens did he have on his farm?

- 1) 22
- 2) 6
- 3) 10
- 4) 96

Answer: 3

SOLUTION 1 :

Step 1: $16 \times 2 \text{ legs} = 32 \text{ legs}$

Step 2: $44 - 32 = 12 \text{ legs left}$

Step 3: $12 \text{ legs} \div 2 \text{ legs} = 6 \text{ goats}$

Step 4: $16 - 6 = 10 \text{ chickens}$

He have 10 chickens on his farm.

5) Which of the following numbers cannot be divided by 4 without any remainder?

- 1) 548
- 2) 232
- 3) 500
- 4) 549

Answer: 4

SOLUTION 1 :

$500 \div 4 = 125$

$548 \div 4 = 137$

$232 \div 4 = 58$

$549 \div 4 = 137 \text{ Remainder } 1$

Write eighty thousand and forty in numerals.

Answer: 80040

7) The sum of all the factors of 28 is the 8th multiple of a number.
What is the number?

Answer: 7

SOLUTION 1 :

Step 1: Factors of 28 → 1, 2, 4, 7, 14 and 28.

Step 2: $1 + 2 + 4 + 7 + 14 + 28 = 56$

Step 3: 8th multiple = 56

Step 4: $56 \div 8 = 7$

The number is 7.

8) What is the smallest 3-digit even number that can be formed using the digits 5, 9, 6 and 3?

Answer: 356

SOLUTION 1 :

Arrange the 3-digit number: 356

9) Write 6 millions, 8 thousands, 6 hundreds and 3 ones in numbers.

Answer: 6008603

SOLUTION 1 :

Step 1: $6 \times 1\,000\,000 = 6\,000\,000$

Step 2: $8 \times 1000 = 8\,000$

Step 3: $6 \times 100 = 600$

Step 4: $3 \times 1 = 3$

$6\,000\,000 + 8\,000 + 600 + 3 = 6008603$

10) Solve the problem below.

$132 \times 78 = (100 \times 78) + (40 \times 78) - (\text{___} \times 78)$

Answer: 8

SOLUTION 1 :

Step 1: $100 + 40 = 140$

SOLUTION 1 :

Book		\$5
Book		\$5
Magazine		\$80
Magazine		
Magazine		

Step 1: $2 \times \$5 = \10

Step 2: $\$80 - \$10 = \$70$

Step 3: 5 units = \$70
 1 unit = $\$70 \div 5$
 = \$14

Step 4: $\$14 + \$5 = \$19$

Each book cost **\$19**.

14) There are 11 children. 8 of them can cycle and 6 of them wear glasses. 4 of them do not wear glasses but can cycle. How many children wear glasses and can cycle?

Answer: 3

SOLUTION 1 :

Total Student	Step1 Wear glasses	Step 2 Can cycle	Step 3 Cycle but do not wear glasses
11			
1		✓	✗
2		✓	✗
3		✓	✗
4		✓	✗
5		✓	
6	✓	✓	
7	✓	✓	
8	✓	✓	
9	✓		
10	✓		



Hint: Start with the item with the most number of children.

3 children wear glasses and can cycle.

15) Round off 24868 to the nearest hundred.

Answer: 24900

SOLUTION 1 :

68 is more than 50. Hence, we round up the number.

Answer: 24900

16) Janice, Christina and Jill visit the library regularly.

Janice visits the library every 4 days.

Christina visits every 9 days while Jill visits every 8 days.

If they met each other today, how many days later will they meet again?

Answer: 72

SOLUTION 1 :

Step 1: Multiples of 4 = 4, 8, 12, 16, 20, 24, 28, 32, 36, 40, 44, 48, 52, 56, 60, 64, 68, 72, 76, 80, ...

Step 2: Multiples of 9 = 9, 18, 27, 36, 45, 54, 63, 72, 81, 90, 99, 108, ...

Step 3: Multiples of 8 = 8, 16, 24, 32, 40, 48, 56, 64, 72, 80, 88, ..

They will meet again 72 days later.

17) Joanna has some 5-cent and 10-cent coins. The coins add up to 100 cents. There are 2 more 5-cent coins than 10-cent coins. How many 5-cent coins than 10-cent coins.

How many 5-cent coins and 10-cent coins has Joanna got?

Answer: 8 five-cent coins

Answer: 6 ten-cent coins

SOLUTION 1 :

There are 2 more 5-cent coins than 10-cent coins.

Step 1: The value of the 2 five-cent coins $\rightarrow 2 \times 5$

= 10 cents

Step 2: 100 cents - 10 cents

= 90 cents

Step 3: The value of 1 set of 1 five-cent coin and 1 ten-cent coin $\rightarrow 5 \text{ cents} + 10 \text{ cents}$

Step 4: $90 \div 15$ cents
 $6 + 2$

= 15 cents
= 6 (10-cent coins)
= 8 (5-cent coins)

Joanna has 8 five-cent coins and 6 ten-cent coins.

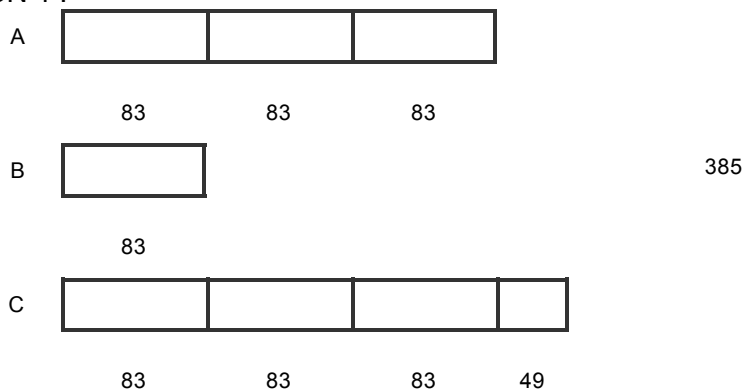
18) There were a total of 385 apples in three boxes.

When 42 apples were moved from Box A to Box B, and 35 apples were moved from Box B to Box C, there were thrice as many apples in Box A as Box B and 49 more apples in Box C than Box A.

How many apples were there in Box B at first?

Answer: 41

SOLUTION 1 :



Step 1: $385 - 49 = 336$

Step 2: $336 \div 7 = 48$

Step 3: $48 + 35 = 83$ (This is the number of apples before moving apples from Box B to Box C)

Step 4: $83 - 42 = 41$ (This is the number of apples before moving apples from Box A to Box B)

There were **41 apples** in Box B at first.

19) Five dolls and three doll houses cost \$192.00.

Five dolls and six doll houses cost \$204.00.

What is the cost of a doll?

\$ Answer: 36.00

SOLUTION 1 :

5 dolls + 3 doll houses → \$192.00

5 dolls + 6 doll houses → \$204.00

Step 1: 6 doll houses - 3 doll houses = 3 doll houses

Step 2: 3 doll houses → $\$204.00 - \$192.00 = \$12.00$

Step 3: 1 doll house → $\$12.00 \div 3 = \4.00

Step 4: 3 doll houses → $3 \times \$4.00 = \12.00

Step 5: 5 dolls → $\$192.00 - \$12.00 = \$180.00$

Step 6: 1 doll → $\$180.00 \div 5 = \36.00

20) Trees were planted along each side of a triangular shaped garden such that an equal number of trees were found along each side of the garden. There is a tree planted at each corner of the triangular shaped garden.

If there were 153 trees planted, how many trees were there along each side of the garden?

Answer: 52

SOLUTION 1 :

Note: Need to take away 3 trees from the 3 corners of the triangle to prevent double counting.

Step 1 : $153 - 3 = 150$

Step 2 : $150 \div 3 = 50$

Step 3 : $50 + 2 = 52$

There were 52 trees along each side of the garden.