

# Titan-Genius Kidz National Arithmetic Championship-3

Question Paper

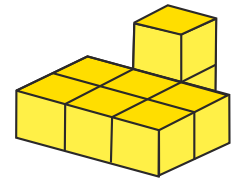
Category : **JUNIOR** (6<sup>th</sup> & 7<sup>th</sup> Std.)

1) Justin solved the problem below. Which expression could be used to check his answer?

$$1364 \div 3 = 454 \text{ : Remainder} = 2$$

- (A)  $(454 \times 3) + 2$       (B)  $(454 \times 2) + 3$       (C)  $(454 + 3) \times 2$       (D)  $(454 + 2) \times 3$ .

2) Eight (8) blocks have been glued together to make the shape below. How many faces of these blocks have glue on them?



3) What is the rule for this number pattern?

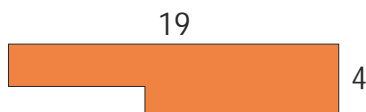
1, 1, 2, 6, 24, ...

- (A) Add 0, then add 1, then add 2, and so on      (B) Multiply by 1, then multiply by 2, then multiply by 3, and so on  
(C) Multiply by 1, then add 1      (D) Multiply by two, then subtract 1.

4) A teacher wrote whole numbers sequentially from 1 to 2009 (i.e., 1, 2, 3, ..., 2008, 2009) on a whiteboard. Then she asked student A to underline all numbers divisible by 2, student B to underline all numbers divisible by 3, and student C to underline all numbers divisible by 4. When the students were done underlining, how many numbers were underlined exactly twice?



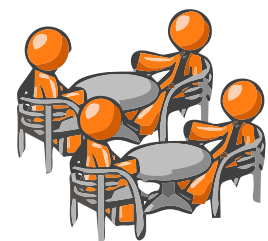
5) All angles in the figure are right angles.



The perimeter of the figure is between

- A) 15 and 26      B) 37 and 44      C) 45 and 55      D) 100 and 200

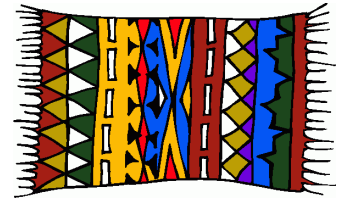
6) Andy, Billy, Clarence, and David said the following about a certain number: Andy: "This number is 91"; Billy: "This number is prime."; Clarence: "This number is even."; David: "This number is 87." Only one statement given either by Billy or Andy is true, as well as only one statement given by either Clarence or David is true. What is the number?



7) What is the starting number (?)



- 8) Carpeting is on sale and Mrs. Doyle is looking for some carpet for her living room. Her living room is 4m by 5m. How much will it cost her to do this at sale price?
- CARPET SALE  
Regular \$9.99 per square metre  
Now on Sale for : 20 percent off



- 9) Uncle Henry was driving to Halifax when he spotted a speeding truck dashing against a car and speeding away without stopping. Uncle Henry noted the number of the truck. When the police arrived at the spot, he volunteered to give information about the speeding truck but in the form of a puzzle. His clues were like this ...

- 1) The number plate definitely had a number "1".
- 2) In the hundred's place the number is 3 times the number in the thousand's place.
- 3) The number in the one's place is 4 times the number in the ten's place.
- 4) The number 2 is sitting in the thousand's place.



What is the number?

- 10) There are 3 people. The age gap between each of them is 2 yrs and their total age is 69 yrs. How old is the second person?

- 11) Which sign makes the following true?

$$-7 \ ? \ -3$$

- A) >                      B) <                      C) =



- 12) Evaluate:  $87 + (-16) - (-48) + 36 =$  \_\_\_\_\_

- 13)  $\frac{-832}{0.4} =$  \_\_\_\_\_

- 14) Write -0.209 as a fraction in simplest form. \_\_\_\_\_

- 15) Write these numbers in order from least to greatest :  $\frac{-38}{40}$ ,  $\frac{13}{20}$ ,  $\frac{-18}{24}$



- 16) Simplify your answer and write it as a proper fraction or as a whole or mixed number.

$$\frac{-1}{2} \times \frac{-4}{5} \times \frac{3}{-6}$$

- 17) Mark accidentally tore out a page of his math book. Mr. Mason asked him what page it was. Mark said that the sum of the page numbers on the facing pages was 127. What are the page numbers on the pages Mark tore out of the book?



- 18) A number sequence is shown below:

3, 7, 2, 1, 5, 2, 3, 7, 2, 1, 5, 2, 3, 7, 2, 1, 5, 2, .....

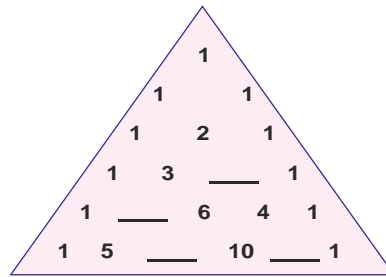
What is the sum of the first 122 numbers? What is the 138th number?

- 19) Can you solve this magic square?

Put the remaining numbers from 0 to 15 in the 16 small squares. The sum of the four numbers in each row, column and two diagonals must be 30.

15			12
	10	9	
			11
3			0

20) Fill in the blanks in this diagram.



21) What is the reciprocal of  $-\frac{9}{7}$  ?

22) From the following , select an answer which is closest to 24% of 33

- A)  $\frac{1}{2} \times 34$       B)  $\frac{1}{4} \times 34$       C)  $\frac{1}{2} \times 32$       D)  $\frac{1}{4} \times 32$

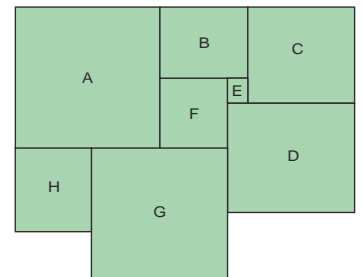
23) 5 hundreds 6 ones 19 tens and 3 tenths is what number?

24)  $\frac{1}{2} + \frac{1}{4} \times \frac{3}{4} =$

25) In the olden days there were elevator operators to transport passengers. Don Downs always started his day in the basement. He went up 20 floors to take his boss some coffee. Then he went down 8 floors to take a Danish to his friend. He went up 7 floors to check things out. This was the halfway point in the building. How many floors are in this building?



26) Look at this picture of squares. The area of square F is 16 square units. The area of square B is 25 square units. The area of square H is 25 square units. Find the area for square D and square E.



27) How do you write 0.009 in fraction?

- A)  $\frac{9}{10}$       B)  $\frac{9}{100}$       C)  $\frac{1}{1000}$       D)  $\frac{9}{1000}$

28) Which set of numbers is arranged in ascending order?

- A)  $0.47 < 74 < 87.4$       B)  $87.4 < 74 < 0.47$       C)  $74 < 87.4 < 0.47$

29) Evaluate:  $-2.3 \times 95.6 \times -2.5 \times -0.2 =$

30) What is  $3^4$ ?

- A) 72      B) 87      C) 12      D) 81



31) Vladimir builds 3 legged stools and 4 legged tables. Last month he used 72 legs to build some stools and tables. No. of stools were 3 more than no. of tables. How many stools and how many tables did he build?



32) Conrad's Taxi Service charges \$1.50 for the first mile and \$.90 for each additional mile. How far could Mr. Kulp go for \$20 if he gives the driver a \$2 tip?



33) Andrew, Jolene and Tommy each draw 3 cards from 9 cards numbered 1, 2, 3, ..., 9.

Andrew : The product of all my numbers is 48

Jolene : The sum of all my numbers is 16

Tommy : The product of all my numbers is 63

What is the largest number of Jolene's card?



34) 75% of \_\_\_\_\_ = 75

35) A box of chocolates can be shared equally between 2 children. It can also be shared equally among 3, 4, 5 as well as 6 children. What is the minimum no. of chocolates in the box?



36) Replace x in  $1 \times 832$ , such that, when you round it off, you get 17,000?

A) 7

B) 8

C) 6

D) 4

37) Evaluate:  $(-0.8)^2 \times 3^2 + 9^3 =$  \_\_\_\_\_

38) Which sign makes the following true?

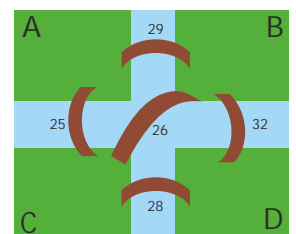
$(1.3 \times 10^2) ? (3.1 \times 10^2)$

A) >

B) <

C) =

39) There are cows in each of these pastures. The pastures are connected by bridges. The number on each bridge tells the total number of cows in the 2 connecting pastures. How many cows are there in each pasture? Hint: Each pasture has more than 10 cows and less than 20 cows.



40) In an ancient grave, an archaeologist discovered a tomb which carried a pattern of numbers. Some of these numbers had been defaced. Please help the archaeologist to decode the number pattern.

4	9	9	11	x	12	15	8
x	5	x	3	4	x	9	x
1	4	x	8	2	x	6	x
3	x	14	x	8	35	x	15

