

Titan-Genius Kidz National Arithmetic Championship 2010-2011



Category: **SENIOR** (8th, 9th & 10th Std.)

General Instructions :

- Do not open this booklet until you are told by your teacher to begin. You will have only 30 minutes working time for this contest. Attempt as many questions as possible. You might be UNABLE to attempt all the questions in the time allowed.
- Please use a ball point pen / ink pen / gel pen for writing the answers. However this is a suggestion only and not mandatory.
- All questions DO NOT carry equal marks.
- There is no negative marking for incorrect answers

Write in CAPITAL letters only

To be filled in by student

Name of the Student _____

Standard _____ Gender _____ Date of Birth _____

To be filled in by school

School's address with seal

School's Tel No. _____

Supervisor's name: _____

Supervisor's Sign. _____

For Official use only

Name of the Evaluator: _____ Score: _____

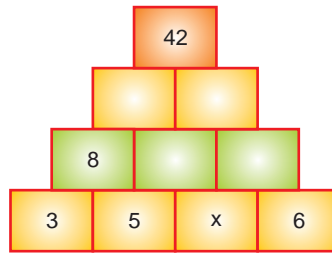
Signature of the Evaluator: _____

1. $22 + 44 + 66 + 88 + 100 = ?$



Ans :

2. In the figure, number 8 is obtained by adding the numbers directly below it. The other numbers in the top three rows can be obtained in the same way.



The value of x is

- a) 5 b) 6 c) 7 d) 8 e) 9

3. 50% of 50% of 50% of 50 is

- a) 12.5 b) 6.25 c) 0.625
d) 62.5 e) 1.25

Ans :

4. $(5 \times 4 \times 3 \times 2) - (5 \times 4 \times 3) = ?$

- a) 1 b) 2 c) 20
d) 60 e) 120

Ans :

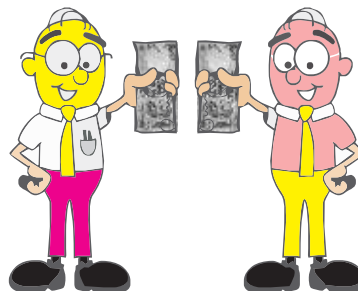
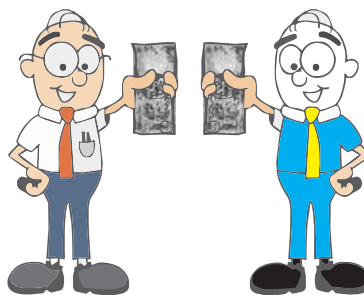
5. $5 \times 5 \times 5 \times \frac{5}{5} = ?$

Ans :

6. $101020 \times 1100 = 100 \times ?$

Ans :

7. Four persons, Akshay, Brijesh, Chethan and Danny have a total of Rs.200 among themselves. Akshay and Brijesh have between them as much money as Chethan and Danny have between them. Akshay has more money than Brijesh. Chethan has only half the money that Danny has. Akshay has Rs.10/- more than what Danny has. Who has the most money?



- a) Akshay b) Brijesh
c) Chethan d) Danny
e) Shreyas

Ans :

8. A construction site has 27 workers of which $\frac{1}{3}$ are men and $\frac{2}{3}$ are women. The contractor decides to change this ratio, in which $\frac{1}{4}$ will be men and $\frac{3}{4}$ will be women. He cannot reduce the number of workers. So how many more women workers he should hire?

a) 8 b) 9 c) 6 d) 5 e) 10

Ans :



9. The smallest number which must be added to 955 to make it a perfect square is

a) 4 b) 6 c) 15 d) 25 e) 30

Ans :

10. As a decimal number, 15.32% is equal to

a) 0.01532 b) 0.1532
c) 1.532 d) 0.001532

Ans :

11. The value of $\frac{3.040 \times 3040}{30.40 \times 304.0}$ is

a) 0.1 b) 0.01 c) 1
d) 10 e) 100

Ans :

12. $1354 + 2654 + 3954 + 1254 - 1254 = ?$

Ans :

13. $101 + 102 + 103 + \dots + 110 = ?$

Ans :

14. Rahul has three types of toys – Trains, Cars, Puppies

All his toys except 16 are Cars

All his toys except 32 are Trains

All his toys except 24 are Puppies



What is the number of Cars that Rahul has?

Ans :



15. Exactly 180 seconds after midnight, the correct time is

- a) 12.03 pm b) 12.03 am
c) 3 pm d) 3 am e) 11.05 am

Ans :

16. $1.8 \text{ m} + 80 \text{ cms} + 0.03 \text{ kms} = ?$

- a) 3.26 m b) 326 m
c) 32.6 m d) 0.326 m

Ans :

17. Of the following numbers, which is closest in value to 2 ?

- a) 1.995 b) 1.99
c) 2.01 d) 2.1

Ans :

18. $\sqrt{\sqrt{\sqrt{81}} \times \sqrt{81}} = ?$

Ans :

19. Mrs. Edward is proud that she is a good bargainer when she goes shopping. She selects a dress in a shop whose price tag reads like this: "Original Price Rs.1300/-. Today's selling price: Rs.975/-". Mrs. Edward says that she is not satisfied with the discount and demands a discount of 20% on the original price. After much bargaining, the shop-keeper agrees to sell the dress at 20% discount on the original price.

Now, which of the following statements about Mrs. Edward is correct?

- a) She gained from the bargain
b) She lost in the bargain
c) She neither gained nor lost in the bargain



Ans :

20. Ishanth Sharma bowls at a speed of 144 km per hour. If the distance the ball travels is 20 meters, then the time taken by it in seconds is

- a) $\frac{1}{3}$ b) $\frac{1}{4}$ c) $\frac{1}{2}$ d) $\frac{2}{5}$ e) $\frac{2}{3}$



Ans :

21. A family of 4 went to a restaurant whose menu card read like this. Starters per head: Rs. 80/- Main course per head: Rs. 250/- Desserts per head: Rs. 70/- Service charge 15%.

What was the total bill?

- a) Rs. 460/- b) Rs. 400
c) Rs.1840 d) Rs. 1800/-



Ans :

22. $2\frac{3}{5} - \frac{4}{5} = ?$

- (a) $1\frac{1}{4}$ b) $1\frac{1}{5}$ c) $1\frac{3}{5}$ d) $1\frac{1}{2}$ e) $1\frac{4}{5}$

Ans :

23. 22% of 222 = ?

- a) 48.84 b) 44.84 c) 4.484
d) 4.884 e) 46.84

Ans :

24. $1.85 \times 1.5 = ?$

- a) 2.775 b) 2.225 c) 2.75
d) 2.075 e) 2.725

Ans :

25. The value of $1 + \frac{2}{2 + \frac{2}{5}} + 5\frac{1}{2}$ in decimal terms is

Ans :

26. During 2nd world war, a jeep built by the Germans had to travel a distance of 20,000 miles in a month. Its top speed was 50 miles per hour. There were two drivers. For safety sake, they decided to get a spare wheel (in addition to the four wheels the jeep already had). During their entire journey, they rotated the wheels cleverly to ensure that all the five wheels run the equal distance. At the end of their journey, how many miles did each wheel run?

- a) 4,000 miles
b) 5,000 miles
c) 12,000 miles
d) 14,000 miles
e) 16,000 miles



Ans :

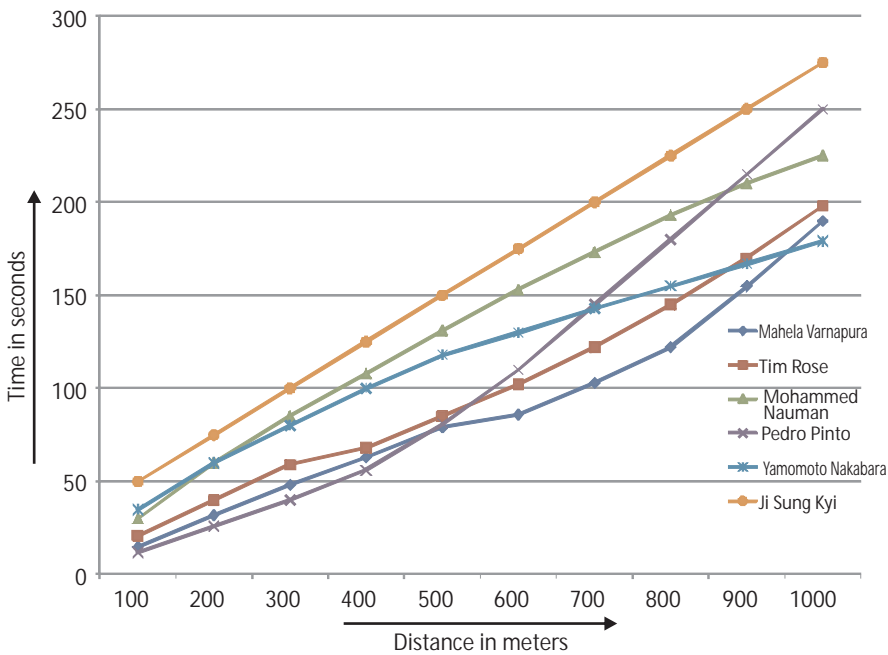
27. $34652 \times 432 = ?$

Ans :

28. $\frac{6276992}{8} = ?$

Ans :

29. In the camp for preliminary rounds for Para-Olympics at the Cape Town, hundreds of athletes ran a 1000 meters race. Data of six athletes are collected and presented in a graph. Study the graph carefully and answer the questions below:



i. Who finished first?

Ans :

ii. Who finished last?

Ans :

iii. What is the time clocked by the athlete who finished third?

- a) 190 b) 198 c) 225 d) 250 e) 179 f) 275

Ans :

iv. Who maintained a constant speed throughout the race?

Ans :

v. At the mark of 300 meters, who was leading?

Ans :

vi. What is the time clocked by Tim Rose at the mark of 600 meters?

Ans :

30. Lowest Temperature in a calendar year was recorded across different zones near the North Pole. The data is given below in a table. Please study the table and answer the questions

Zone	Lowest Temperature
Zone 1	- 59° Cel
Zone 2	- 45° Cel
Zone 3	- 15° Cel
Zone 4	- 78° Cel
Zone 5	- 127° Cel
Zone 6	- 98° Cel



- i. Name the zones which recorded their lowest temperature below -50° Cel.
- ii. Name the zones which recorded their lowest temperature above -90° Cel?
- iii. Which zone recorded the lowest temperature?

31. If Frank walks to his office and rides his bicycle back home it takes him 90 mins. If he rides his bicycle both ways, it takes him 30 mins. What time would he take to make the trip to his office and back by walking both ways? (Assume that he walks at a constant speed and cycles at a constant speed)



32. Rohan writes a 2 digit number on a black board. Sunny inserts the digit "5" between the two digits. The newly formed 3 digit number is 410 more than the original 2 digit number. When Sunny adds up all the 3 digits of the new number, he gets "12" as the sum. Rohan wants to find the difference between the two digits of original number that he wrote. What answer does he get?



33. Jennifer has 5 solid objects – all of equal height "x". She has a Cube and a Pyramid – both of them have square face with side length "x". Jennifer also has a Cone and a Cylinder – both of them have a circular face with diameter "x". She has a Sphere too with diameter "x". Which object has the greatest volume?



- a) Cube
- b) Pyramid
- c) Cone
- d) Cylinder
- e) Sphere

34. If m is an odd number, which one of the following is an even number?

- a) $m-2$ b) m^2 c) $m^2 - 2$ d) $(m-2)^2$ e) $m^2 - m$

Ans :

35. Consider the four numbers a, b, c and d

b is greater than a by $\frac{1}{5}$











b is less than c by $\frac{1}{6}$ and

d is greater than a by $\frac{1}{2}$

If $a+b+c+d = 9\frac{1}{15}$, find the value of a

Ans :

36. Ted wrote a 4 digit number on a piece of paper and challenged Alex to guess it. All the digits were different.

Alex	Ted
 Is it 8935?	 Two of the digits are correct but they are positioned wrongly
 Could it be 7614?	 My answer is the same as before
 Is it 5398?	 Wow! Two of the digits are correct and in the right places as well
 Is it 4167?	 My answer is the same as just the previous one
 Is it 8165?	 None of the digits is correct

What number did Ted write?

Ans :