Sanghamitra

Solutions & Winners

Kids' 'X' Word Solution

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|----------------|-----------------------|---|---|--|--|---|
| ² H | 3 | ⁴C | к | \bigcirc | °A | ⁶ M |
| Α | М | Р | Ο | ⁸ E | Р | Α |
| т | Р | Ο | ¹⁰ T | Ν | Р | R |
| S | ο | ¹² R | S | Ο | 13 L | к |
| 0 | R | Р | \bigcirc | ¹⁵ L | Е | Ο |
| F | т | R | ¹⁷ F | 0 | \bigcirc | ¹⁸ S |
| F | \bigcirc | ²⁰ T | L | Ν | 21 K | Е |
| \bigcirc | ²² U | s | Α | G | Е | \bigcirc |
| | A T S O F | H I A M T P S O O R F T F 222 | HICAMPTP \bigcirc SO 1^2 RORPFTRF \bigcirc 2^{20} TO22 2^{20} T | HICKAMP \bigcirc TP \bigcirc 1^0 TSO 1^2 RSORP \bigcirc FTR 1^7 FF \bigcirc 2^0 TLO 2^2 OO | HICKAMP \bigcirc 8 ETP \bigcirc 10 TNSO 12 RS \bigcirc ORP \bigcirc 15 LFTR 17 FOF \bigcirc 20 TLN | HICKAAMP \bigcirc 8 EPTP \bigcirc 10 TNPSO 12 RS \bigcirc 13 LORP \bigcirc 15 LEFTR 17 FO \bigcirc F \bigcirc 20 TLN 21 K |

Kids Challenge!

Did you find the word? It is "SPHERE".

Smart kids :

1. Sruthi Ainapurapu, St. Louis.

2. Sravya Ainapurapu, St. Louis.

3. D. Aditya, Lucknow.

Kids' 'X'word Winners:

1. Sravya Ainapurapu, St. Louis.

- 2. A. Lakshmi Puja, Visakhapatnam.
- 3. A. Swathi Keertana, Visakhapatnam.

Salutation to your solution! - Answers

1. According to the problem, first person saw 1 and 2 even numbers. So he saw 1,

2, 2. Second person saw only 2 even numbers. So he could see only two faces and they are 2, 2. Third person and Fourth person saw all the three numbers 1, 2, 3. So If you analyze, the dice is having 1, 2, 3, 1 on sides and 2 on the top. Which shows that the number facing down (hiding) is 3.

2. According to the problem, the average of two numbers is 44. So the sum of the

numbers is 88. If we assume one of the numbers is X, then the second number is (88 - X). The product of numbers is given as 1887. So X(88 - X) = 1887. Let us solve for X.

 $88X - X^{2} = 1887$ $X^{2} - 88X + 1887 = 0$ $X = [88 \pm \sqrt{(88^{2} - 4 \times 1 \times 1887)}]/(2 \times 1)$ $X = [88 \pm \sqrt{(7744 - 7548)}]/2$ $X = [88 \pm \sqrt{196}]/2$ $X = [88 \pm 14]/2$ X = 51 or 37.So the numbers are 51 and 37.

3. There are 6 chairs and 5 people. So they can change their positions in ${}^{6}C_{5}$ ways, which is equal to 6 x 5 x 4 x 3 x 2 = 720 ways. Every week they are changing into different positions. So they require 720 weeks to try different possibilities. It comes to approximately 13.846 years.

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4. To find the value of 1 + 3 + 5 + ... + 999, let us start with 2 numbers in the series, then 3 numbers and so on.

 $1 + 3 = 4 = 2^{2}$ $1 + 3 + 5 = 9 = 3^{2}$ $1 + 3 + 5 + 7 = 16 = 4^{2}$ $1 + 3 + 5 + 7 + \dots + 999 = 500^{2} = 250000.$

So the sum of odd numbers from 1 to 999 is 250000.

5. The possible even numbered cards are either 2s, 4s, 6s, 8s and 10s. Each one of them have Hearts, Diamonds, Clubs and Spades. So all together 20 even numbered cards. Total possible cards 52. So the probability of getting an even numbered card is 20/52 = 5/13.

Salutation to your solution! - Winners:

- 1. T. Anoop, East Godavari.
- 3. Vaasanti Maghapu, California.
- 2. Ravi Bhagavatula, Chicago.

Question Gallery! - We ourselves disclosing answers!!

- 1. Bala Gangadhar Tilak is known by the name Lok Manya.
- 2. I.K.Gujral wrote "A foreign policy for India".
- 3. Konark Sun Temple is a 13th-century Sun Temple (also known as the Black Pagoda), at Konark, in Orissa.
- 4. World Health Organization is located in Geneva.
- 5. The capital of Philippines is Manila.
- 6. Pyrometer is an instrument used to measure high temperatures.
- 7. One Tula is equal to 11.664 grams.
- 8. Symbol of Magnesium is Mg.
- 9. Edison Arantes do Nascimento, nickname Pelé is a well known football player from Brazil.

10. A **knockout** (also referred to as a **K.O.**) is a winning criterion in several fullcontact combat sports, such as boxing, kickboxing, Muay Thai, mixed martial arts and others sports involving striking. A knockout is usually awarded when one participant is unable to rise from the canvas within a specified period of time, typically because of fatigue, injury (serious or temporarily incapacitating, e.g. a bleeding cut above the eye can blind a fighter), loss of balance, or unconsciousness.

Question Gallery! – Winners :

- 1. Vaasanti Maghapu, California.
- 3. T. Anoop, East Godavari Dt.
- 2. Ravi Bhagavatula, Chicago.
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