

Solutions & Winners

Kids' 'X' Word Solution

1	S	2	N	3	O	4	W		5	B		6	O
7	T	R	O	L	8	L	E	9	Y				
10	E	I	G	H	T		11	R	12	A			
A		13	L	I	I	C	C	E					
14	M	15	O	I	S	T			R				
	V		T		16	I	17	T	I				
18	N	E	19	V	E	20	R		21	R	A		
22	O	R	E		23	E	V	I	L				

Kids Challenge!

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

Smart kids :

1. Sravya Ainapurapu, St. Louis, Missouri.
2. Tarun, New Jersey.
3. Upagya Kompalli, St. Louis.

Kids' 'X' word Winners:

None.

Mistakes in the clues.

Down 12 : Wire or rod (not wire of rod)

Down 18 : SNOW instead of SLOT.

Salutation to your solution! - Answers

1. Answer is 2 days and 6 hours.

Pump A fills the tank in 9 hours. So in one hour it fills $1/9^{\text{th}}$ of the tank.

Pump B fills the tank in 10 hours. So in one hour it fills $1/10^{\text{th}}$ of the tank.

Pumps A and B together fills $(1/9 + 1/10)^{\text{th}}$ part of the tank.

Pumps A and B together fills $2(1/9 + 1/10) = 2(19/90) = 38/90^{\text{th}}$ part.

Remaining part of the tank = $1 - 38/90 = 52/90$.

Pump C drains the tank in 5 hours. So in an hour it drains $1/5^{\text{th}}$ of the tank.

Pumps A, B and C together can fill $(1/9 + 1/10 - 1/5) = 1/90^{\text{th}}$ part of tank.

So all the pumps working together can fill the remaining portion of the

tank in 52 hours. Including the 2 hours of time the pumps A and B

worked in the beginning, they took 54 hours to complete the tank. Which is equal to 2 days 6 hours.

2. Answer is 61 years. Assume the professor's age is x. Then the son's age is

$x-24$. Son's age is 25 years more than Grandson's age. Thus grandson's

age is $x-24-25 = x-49$. Sum of Professor's age and grandson's age = $x+x-$

$49 = 2x-49$.

So $2x - 49 = 73$

$2x = 122 \Rightarrow x = 61$.

3. Answer is 5.

(1 x 1), (1 x 2), (2 x 2.5), (5 x 3), (15 x 3.5), (52.5 x 4), (210 x 4.5)

4. Answer is 3375.

If we calculate from the end, the number remained at the end is 5. When the Two digit number is divided by 15, the tens place disappeared. So that number is $5 \times 15 = 75$. When Three digit number is divided by 5, hundreds place disappeared. So that number should be $75 \times 5 = 375$. When the Four digit number is divided by 9, Thousands place disappears. So that number is $375 \times 9 = 3375$.

5. Answer is 25.839 sq. meters.

Lower portion of the tent is a cylinder having diameter 2.1 m and height 3m.

The lateral surface area of that portion is $2\pi rh$,
which is equal to $2 \times (22/7) \times (2.1/2) \times 3 = 19.8$ sq. meters.

The top portion is a cone with diameter 2.1 m and height 1.5 m.

The lateral surface area is πrS , where $S = \sqrt{(1.5)^2 + (1.05)^2} = 1.83$ m.

So the lateral surface area of the cone is $(22/7) \times (2.1/2) \times 1.83 = 6.039$ sq. m.

So we need $19.8 + 6.039 = 25.839$ sq.m. canvas for the construction of the tent.

Salutation to your solution! - Winners :

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|--|--------------------------------|
| 1. Sarala Mamidipalli, Cincinnati, OH. | 4. T. Anoop, East Godavari Dt. |
| 2. Vaasanti Maghapaty, California. | 5. Sarada Shonti, Kakinada. |
| 3. Ravi Bhagavatula, Chicago, IL. | |

Question Gallery! - We ourselves disclosing answers!!

1. Sarojini Naidu is known as 'Nightingale of India'.
2. Swapna Vaasavadatta was written by Sri. Bhasa.
3. Hawa Mahal is located in Jaipur, Rajasthan.
4. Draksharamam known as 'Kasi of south' is in East Godavari district, near by Kakinada.
5. The capital of the state Sikkim is Gangtok.
6. Periscope is used to view the activity on earth or ocean from a submarine.
7. Nano second is equal to 100-crore_{th} (1000000000th) part of a second.
8. Symbol of Silver is Ag.
9. C.K. Naidu is a well known cricketer from India. He contributed to Indian Cricket as a batsman during the period 1916 – 1963.
10. The word 'Back hand' is used in Lawn Tennis and Table Tennis.

Question Gallery! – Winners : Sreekanth Gutala, St. Louis, Missouri.