

ANSWERS FOR MATH AT HOME!

April 20, 2020
Edition 1

While everyone is "staying the blazes home", here are some fun Math activities to keep minds sharp and engaged.

KenKen

How to Solve KenKen® Puzzles

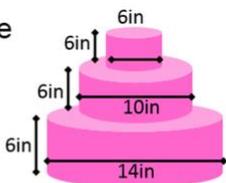
1. Fill in each square cell in the puzzle with a number between 1 and the size of the grid. ...
2. Use each number exactly once in each row and each column.
3. The numbers in each "Cage" (indicated by the heavy lines) must combine — in any order — to produce the cage's target number using the indicated math operation.

For this KenKen, use numbers 1 to 4.
Also, / means ÷.

8 × 4	1	5 + 3	2
2	2 / 4	4 × 1	8 + 3
2 - 3	2	4	1
1	1 - 3	2	4

Cooking at Home

Maddie is making a 3-tier wedding cake based on the bride's sketch. One batch of frosting costs \$5 and covers 100 square inches. If she does not frost the bottoms of each layer, how much will it cost Maddie to frost the cake?



Area is 249π or 782.3 in^2
Therefore need 8 batches which will cost a total of \$40.

Simplify (keep as a fraction):

$$\frac{1}{2 + \frac{1}{2 + \frac{1}{2 + \frac{1}{2}}}}$$

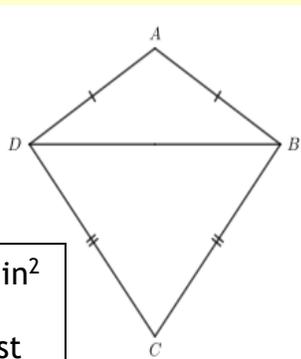
$\frac{12}{29}$

Riddles:

1. A tree doubled in height each year over the course of ten years until it reached its maximum height. How many years did it take to reach half of its height?
9 years
2. If 7 people meet each other and shake hands only once with each of the others, how many handshakes will there be?
21
3. What is at the beginning of eternity, the end of time, the beginning of every end and the end of every place?
The letter "e"
4. If it takes Gary 1 hour to dig a hole 2 m long, 2 m wide and 2 m deep, at the same rate how long would it take him to dig a hole 4 m long, 4 m wide and 4 m deep?
8 hours

Go Fly a Kite!

A kite is composed of 2 isosceles triangles, $\triangle ABD$ and $\triangle BCD$. The height of $\triangle BCD$ is twice the height of $\triangle ABD$ and the width BD is 1.5 times the height of $\triangle BCD$. If the area of the kite is 1800 cm^2 , what is the perimeter? Hint: Let x = height of smaller triangle.



$(20\sqrt{13} + 100) \text{ cm}$
or approximately
 172.1 cm

April Foolery

On April 1st, three lads played April Fools jokes on different teachers from their school. From the clues given, can you identify each lad and say what teacher of what lesson he managed to con?

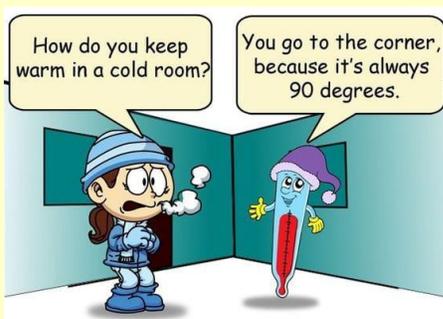
1. Jimmy managed to catch the female biology teacher off her guard.
2. Young Diddler succeeded in fooling Mrs. Baker.
3. The Math teacher fell for Catcher's wiles.
4. Tommy's victim was not Mr. Green and Danny did not trick the English teacher, who is not Miss Jones.

	Catcher	Diddler	Kidham	Mrs Baker	Mr Green	Miss Jones	Biology	English	Maths
Danny									
Jimmy									
Tommy									
Biology									
English									
Maths									
Mrs Baker									
Mr Green									
Miss Jones									

Example →

		owners					breeds				
		Arilla	Barbara	Douglas	Fernando	Ginger	beagle	bulldog	chow chow	great dane	mettose
years	2006	X	X	X	X				X		
	2007	X	X	X	●		X		●	X	X
	2008	●	X	X	X				X		
	2009	X			X				X		
	2010	X			X			X	X		X
	2011	X			X				X		
dogs	Max					X					
	Molly	X	X	X	X	●					
	Riley			X							
	Samson	X				X					
Shadow					X						

First Name	Last Name	Teacher	Subject
Danny	Catcher	Mr. Green	Maths
Jimmy	Kidham	Miss Jones	Biology
Tommy	Diddler	Mrs. Baker	English



Answers for these will be in Edition 2. Stay safe and practice social distancing!