

MATH AT HOME!

May 4, 2020
Edition 2

Well done New Brunswick! Keep up the good work of avoiding and spreading Covid-19. Try some fun math activities to pass the time.

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.

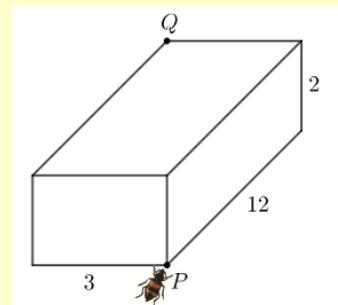
For this KenKen, use numbers 1 to 4.
Also, / means \div .

2 /		9 +	2 -
24 ×			
5 +			2 /
	3 ×		

Beetle Block Walk

A beetle crawls on the surface of the $2 \times 3 \times 12$ rectangular prism shown. The beetle wishes to travel from P to Q. What is the shortest path from P to Q that the bug could take?

Hint: Draw the block out as a net to visualize and strategize!



Kitchen Size:

A floor plan for a home is shown below. The laundry room and dining room are both square with areas of 4 m^2 and 25 m^2 respectively. The living room is rectangular with an area of 30 m^2 . Find the area of the kitchen.



Riddles:

1. It takes Ahmed three hours to paint a fence and it takes Jacques six hours to do the same job. How long would it take if they worked together at their normal paces?
2. A man, his wife and their 2 sons come to a river they wish to cross. They find a rowboat which can only carry a maximum of 150 pounds. The man and the wife each weigh 145 pounds and the sons each weigh 75 pounds. How will they get across the river using the boat and how many trips will it take?
3. When asked how old she was, Edna replied, "in two years I will be twice as old as I was five years ago." How old is she now?
4. Barney Fife was washing windows on a high-rise building when he slipped off a sixty-foot ladder onto the concrete sidewalk. How was it possible he did not injury himself?

Winter Olympic Skaters

Christina, Martha, Natalie and Silvia are figure skaters who competed in the Winter Olympics. Silvia, Martha, Christina and Natalie each finished in first, second, third or fourth in the figure skating event. There were no ties.

Silvia, Martha, Christina and Natalie are also from different countries. One is from Canada, one is from China, one is from Croatia and one is from New Zealand.

Using the following clues, determine who placed first, second, third and fourth, and for which country each athlete was competing.

- Christina did not beat Martha in the competition.
- The Croatian athlete did not finish in first place.
- The athlete from New Zealand finished in fourth place.
- Silvia finished ahead of the competitor from China.
- Christina competes for a country starting with 'C'.
- Silvia is not from Canada.

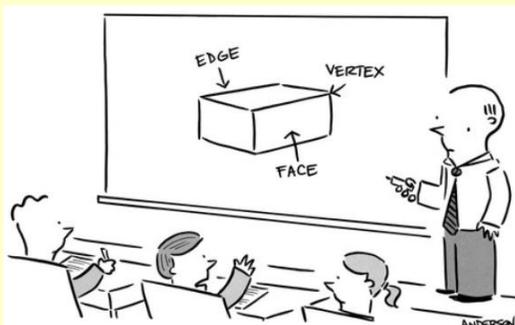
	1 st	2 nd	3 rd	4 th	Canada	China	Croatia	New Zealand
Christina								
Martha								
Natalie								
Silvia								
Canada								
China								
Croatia								
New Zealand								



Example →

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

Name	Results	Country



"That's fine, but you haven't told us the most important part - what's *in* it?!"

Answers for these will be in Edition 3. Stay safe and practice social distancing!