

# CTSC MATHS THINKER

Grade 4 - Riddles



This week we will be solving some tricky RIDDLES with the Grade 4 learners. Scroll through the images below for the images that link to the questions.

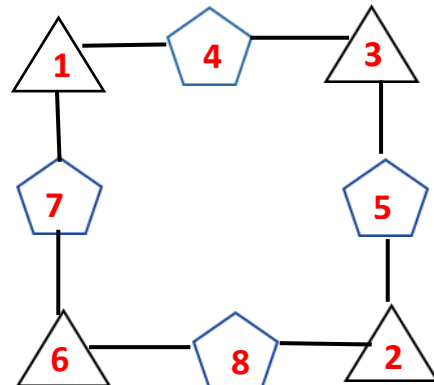
## MEMORANDUM

Place 6 crosses in the squares on the board so that no cross is in the same line (horizontal, vertical or diagonal) of another cross.

			X	X	
X		X			
X				X	
	X				X
			X		X
	X	X			

Two solutions  
X and X

Write the digits 1, 2, 3, 4, 5, 6, 7 and 8 so that the numbers in the pentagon are equal to the two numbers in the triangles added together. Each digit can only be used once. There are 8 possible solutions, this is one example.



In a magic square, each row, column and diagonal add up to the same total. Can you fill in the missing numbers in these magic squares?

The sum is 15

2	7	6
9	5	1
4	3	8

The sum is 30

16	6	8
2	10	18
12	14	4



$$= 20$$



$$= 5$$



$$= 1$$

?

$$= 26$$

	+		+		=	60
	+		+		=	30
	-		=	3		
	+		+		=	?

$$\text{Cup 1} = 40$$

$$\text{Cup 2} = 10$$

$$\text{Cup 3} = 25$$

$$\begin{aligned} \text{Cup 1} + \text{Cup 3} &= 50 \\ \text{Cup 1} + \text{Cup 2} + \text{Cup 3} &= 120 \\ \text{Cup 2} + \text{Cup 3} &= 35 \\ \text{Cup 3} &= ? \end{aligned}$$

What is missing?

1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	
18	19	20	21	22	23	24	25	
26	27	28	29	30	31	33	34	
35	36	37	38	39	40	41	42	
43	44	45	46	47	48	49	50	
51	52	53	54	55	56	57	58	

32

What is missing?

$$1 = 5$$

$$2 = 25$$

$$3 = 125$$

$$4 = 625$$

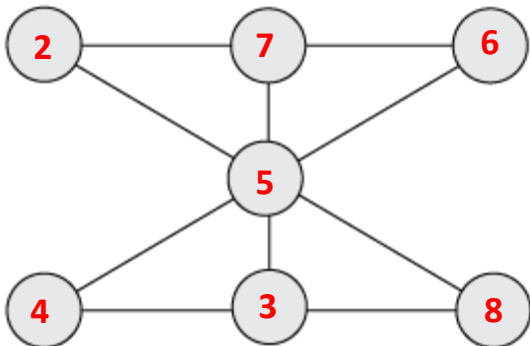
$$5 = 1$$

$$\square + \bigcirc = 53 \quad \bigcirc = 27$$

$$\triangle + \triangle = 36 \quad \triangle = 18$$

$$\triangle + \bigcirc = 45 \quad \square = 26$$

Fill in the numbers 2 to 8 so that each line adds up to 15. Each number can only be used once.



For each pyramid try to figure out which number comes on top.

