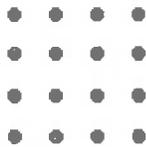## 5th GRADE MATH MADNESS

This year there are 12 math madness problems that are more focused on logic. They are organized as nightly activities; however feel free to pace yourself through these problems in whatever order you feel works best for you. Some are more challenging than others so do your best, this is all for fun.

Lundi:

1)   The following is an square array of 16 dots with 4 rows and 4 columns. The red dots are on the outside of the array. If you use 144 dots to form a square array,
(a) How many rows and columns are there?
(b) How many dots are on the outside of the array?

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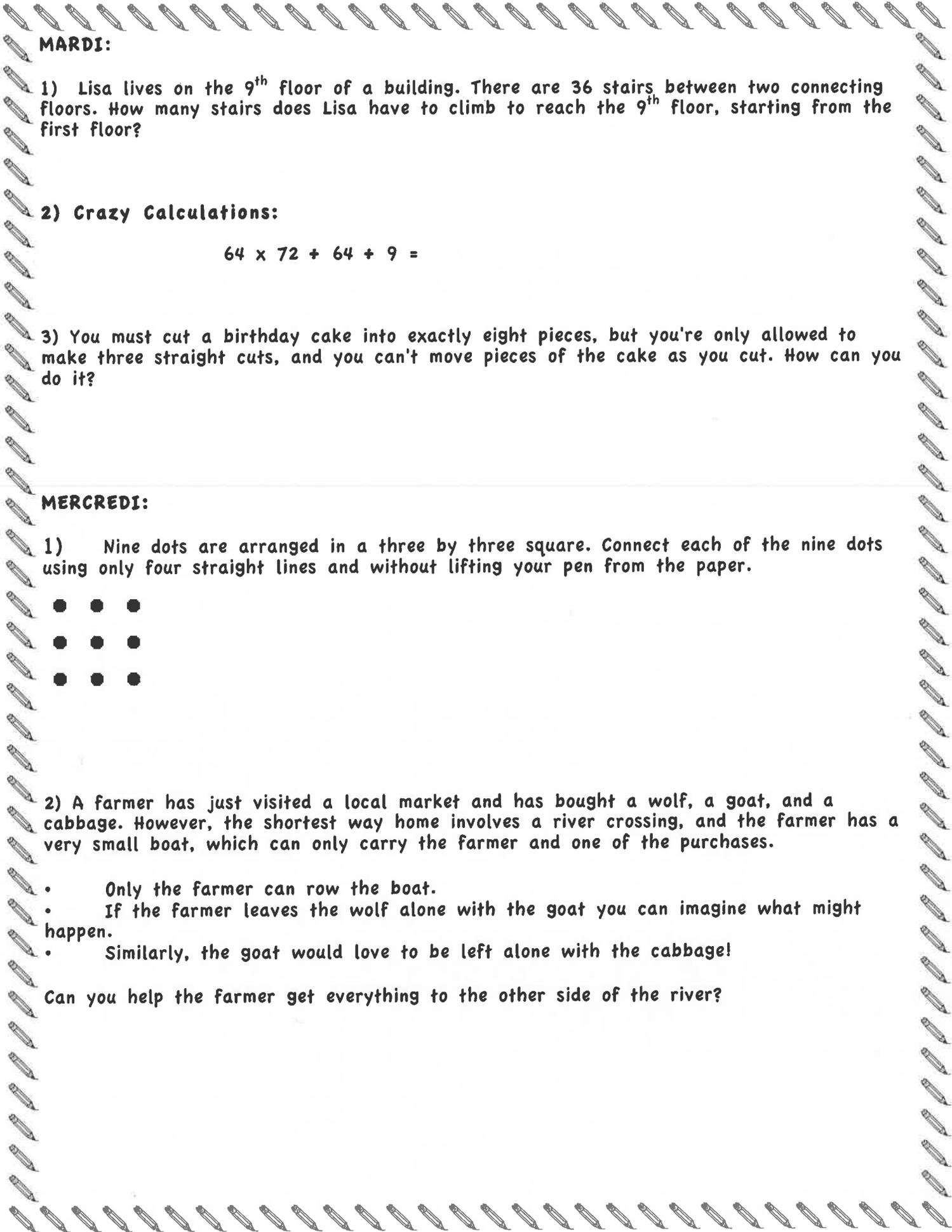
2)

4 princesses ont chacune un bijou.

On sait que :

- Aurore n'a pas le rubis (rouge).
- Sarah n'a pas l'émeraude (verte), ni le cœur en or.
- Victoria n'a pas le diamant noir puisque c'est Noémie qui l'a.
- le bijou de Victoria n'est pas en or.

Retrouve le bijou de chaque princesse.

	Rubis	Émeraude	Diamant noir	Cœur en or
Noémie				
Aurore				
Victoria				
Sarah				

MARDI:

1) Lisa lives on the 9th floor of a building. There are 36 stairs between two connecting floors. How many stairs does Lisa have to climb to reach the 9th floor, starting from the first floor?
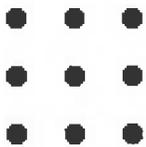
2) Crazy Calculations:

$$64 \times 72 + 64 + 9 =$$

3) You must cut a birthday cake into exactly eight pieces, but you're only allowed to make three straight cuts, and you can't move pieces of the cake as you cut. How can you do it?

MERCREDI:

1)   Nine dots are arranged in a three by three square. Connect each of the nine dots using only four straight lines and without lifting your pen from the paper.

●   ●   ●

●   ●   ●

●   ●   ●

2) A farmer has just visited a local market and has bought a wolf, a goat, and a cabbage. However, the shortest way home involves a river crossing, and the farmer has a very small boat, which can only carry the farmer and one of the purchases.

•   Only the farmer can row the boat.
•   If the farmer leaves the wolf alone with the goat you can imagine what might happen.
•   Similarly, the goat would love to be left alone with the cabbage!

Can you help the farmer get everything to the other side of the river?

JEUDI:

1)   Sam practices soccer for 1 1/3 hours on Friday, 4/9 hours on Saturday and 7/9 hours on Sunday. How many hours of soccer did he practice altogether?

2)

Retrouve à qui appartiennent ces instruments en sachant que :

- Dominique a un instrument à vent (il faut souffler dedans).
- Ce n'est pas Jean-Yves qui a le violon.
- L'instrument de Philippe se fait souvent taper dessus.
- Pascal n'a pas la trompette.
- Jean-Yves n'a pas d'instrument à vent.
- L'instrument d'Alain doit être frotté avec un archet pour jouer.

	Trompette	Violon	Guitare	Flûte	Djembé
Jean-Yves					
Alain					
Dominique					
Philippe					
Pascal					

VENDREDI:

1)   At Hollister Elementary School, Mrs. Wolfe's 3rd grade students line up in a row. If Matt is # 14 counting from the front of the line, and # 8 counting from the back of the line. How many students are in the line?

2)   Can you place six X's on a Tic Tac Toe board without making three-in-a-row in any direction?

3) Sudoku

8			1		3			5
	6	7			4			
							2	
	7		5	4		3		
4								7
		5		6	1		4	
	9							
			2			6	1	
6			3		8			9

AND JUST FOR FUN…

How long you have been alive in years, months, weeks, days, hours, minutes and seconds? Show your work below.