



Each of the jokes indicates a phrase which is one letter off from a mathematical term:

<u>Clue</u>	<u>Answer</u>	<u>Math Term</u>
What did the logician call the dog or cat with nothing inside?	EMPTY <b>P</b> ET	EMPTY <b>S</b> ET
What did the number theorist call the strife that keeps on going?	CONTINUED <b>F</b> RICITION	CONTINUED <b>F</b> RACTION
What did the statistician call the path of a pigskin?	<b>B</b> ALL CURVE	<b>B</b> ELL CURVE
What did the complex analyst call the fictitious wood?	IMAGINARY <b>L</b> UMBER	IMAGINARY <b>N</b> UMBER
What did the geometer call the part of a road?	<b>L</b> ANE SEGMENT	<b>L</b> INE SEGMENT
What did the old-school calculator call the law about sludge?	<b>S</b> LIME RULE	<b>S</b> LIDE RULE
What did the geometer call the Tolkien goblin who was a big deal?	<b>M</b> AJOR <b>O</b> RC	<b>M</b> AJOR <b>A</b> RC
What did the algebraist call the circumstance that contributed to celebration of queer identity?	<b>P</b> RIDE FACTOR	<b>P</b> RIME FACTOR
What did Euler call the non-artificial limb?	<b>N</b> AURAL <b>L</b> EG	<b>N</b> AURAL <b>L</b> OG

Taking all of the changed letters spells **PI A LA MODE**, a fitting answer to the final joke at the bottom of the page.



Here are the answers to all of the clues:

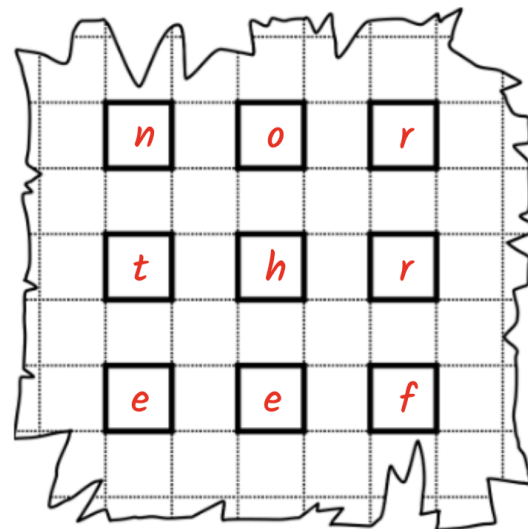
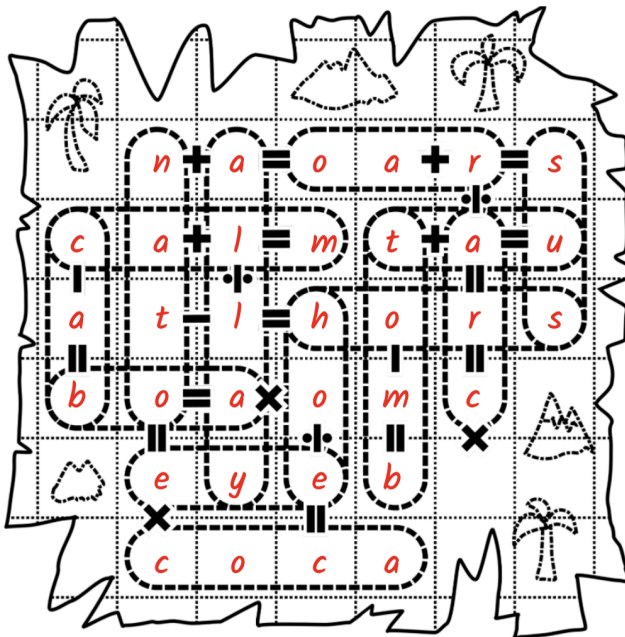
**Across**

- Feathery wrap      BOA
- Tranquil            CALM
- Narcotic shrub    COCA
- Pupil's place      EYE
- \_\_\_\_\_ d'oeuvres    HORS
- Crew tool            OAR
- Greek T             TAU

**Down**

- Alleviate            ALLAY
- Circle part         ARC
- Taxi                  CAB
- Tilling tool         HOE
- Western alliance (abbr.)    NATO
- Questionable, in slang    SUS
- Sealed resting place      TOMB

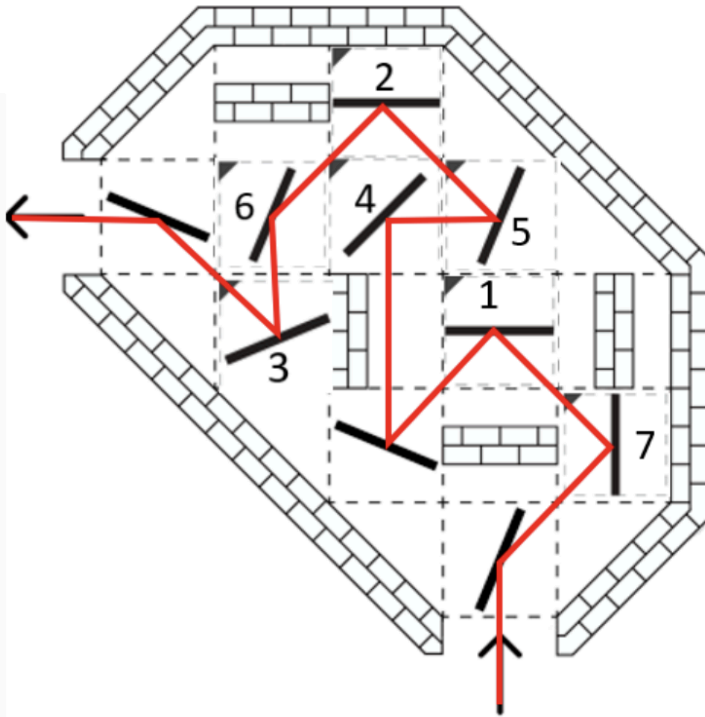
The answers have to be entered in the encircled regions such that the equations are correct when the letters in the words are converted to their numeric representation (A=1, B=2, and so on). For example, the word CAB has to go in the leftmost encircled region because it's the only one where its first letter (3 [C]) equals the sum of its second and third (1 [A] + 2 [B]). Using both the word answers and the equations, you can fill out the grid as follows (showing the numbers and letters separately for clarity):



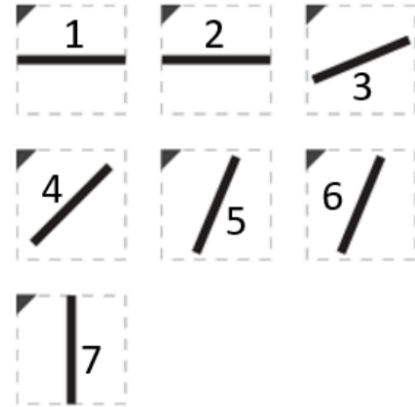
The shaded letters spell out **NORTH REEF**, which is the answer.



The only way that the mirrors can be placed into the grid to direct the laser is shown below, with the dashed line representing the laser:



**MIRRORS:**



*The black triangles are at the top left corners of the mirrors.*

As indicated by the 'signaling' in the flavor text, the solver should then read each of the bounces of the laser as semaphore, ignoring the pre-placed mirrors:

I	N	F	O	N	E	T

This spells out the answer, **INFO-NET**.



The solution to the logic puzzle is:

	<u>Cake</u>	<u>Pie</u>	<u>Muffin</u>
<u>SPICE</u>	<b>2</b> (1)	<b>5</b> (2)	<b>3</b> (4)
<u>BUTTER</u>	<b>3</b> (3)	<b>4</b> (5)	<b>2</b> (8)
<u>FLOUR</u>	<b>1</b> (6)	<b>3</b> (7)	<b>5</b> (9)

Using these letters as indices into the corresponding ingredient (SPICE, BUTTER, and FLOUR), then putting them into the corresponding blanks below:

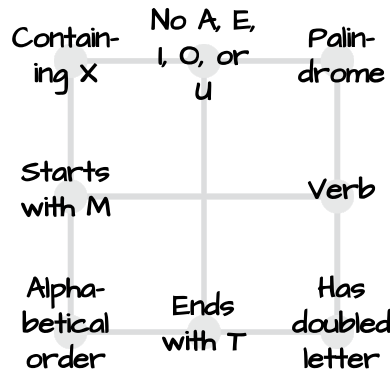
	<u>Cake</u>	<u>Pie</u>	<u>Muffin</u>
<u>SPICE</u>	<b>P</b> (1)	<b>E</b> (2)	<b>I</b> (4)
<u>BUTTER</u>	<b>T</b> (3)	<b>T</b> (5)	<b>U</b> (8)
<u>FLOUR</u>	<b>F</b> (6)	<b>O</b> (7)	<b>R</b> (9)

**P   E   T   I   T            F   O   U   R**  
 (1) (2) (3) (4) (5)            (6) (7) (8) (9)

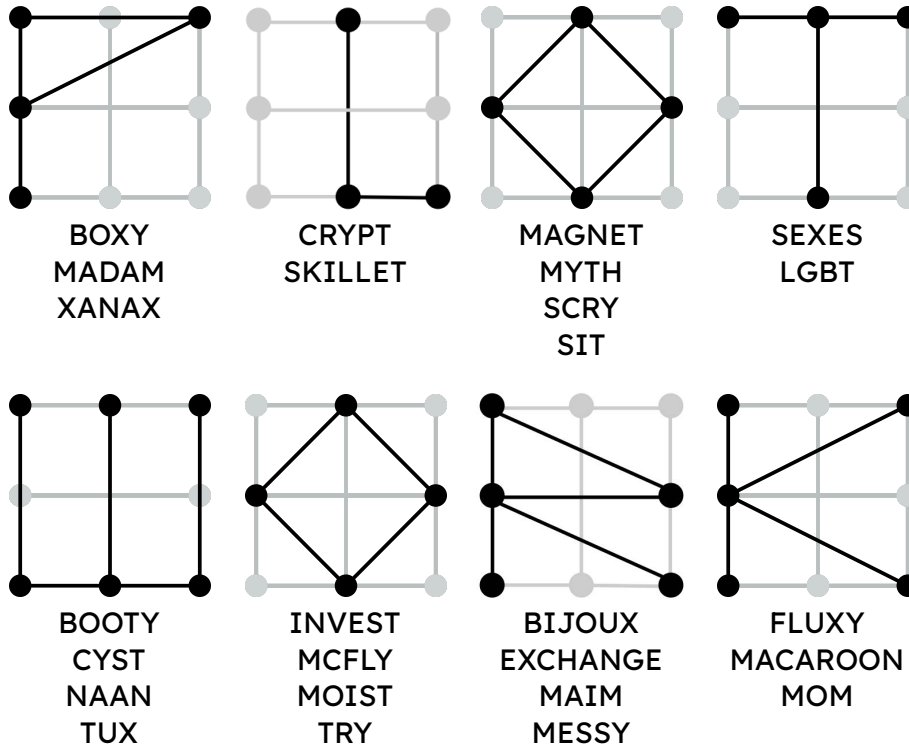
Thus, the answer is **PETIT FOUR**.



Every example word connects two points on the edge of the grid. Solvers should notice that every example word which connects to the same point shares some property. For example, they might notice that every word associated with a line that connects to the top left corner is a palindrome (a word that reads the same forwards and backwards). Using the same logic for all of the connections, the solvers can figure out the property for each point:



At the bottom of the page, they apply the same procedure in reverse, drawing the lines associated with each of the words in the box above. For example, since BOXY contains X and has its letters in alphabetical order, the solver should draw a line from the top left to the bottom left corner. Repeating for all of the words in all boxes:



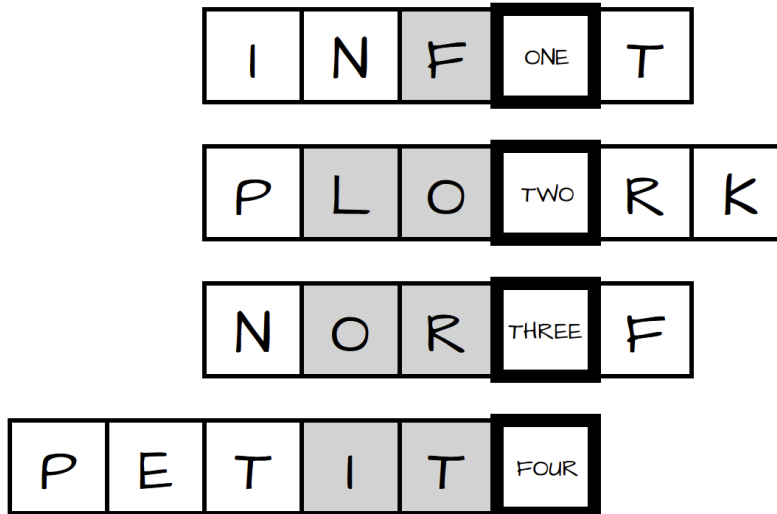
Thus, the answer is **PLOT WORK**.



We can see that each of these answers has a number hidden inside:

<u>Answer</u>	<u>Hidden</u>
INFONET	ONE
PLOT WORK	TWO
NORTH REEF	THREE
PETIT FOUR	FOUR

If we put them in order and align them so that the numbers are in the same position, then read the highlighted letters, we see the final answer, **FLOOR IT**.





# Roman Adder



MATH  
+ PI  
-----  
MORE

JULIE  
+ ANT  
-----  
MUNROE

BULKY  
+ CAPE  
-----  
GUCCI

JAZZ  
+ SUXXIX  
-----  
MCURLY

SMASH  
+ SALE  
-----  
GNAW

BAATH  
+ DORRY  
-----  
QUACK

MUFFY  
+ ACE  
-----  
MUSAVI

1	5	10	50	100	500	1000
I	V	X	L	C	D	M
I	E	A	L	C	D	B
T	H	F	O	N	U	G
Y	K	R	P	S		J
Z	V	X	W			M
						Q

Thus, the answer is **ZERO SUM**.