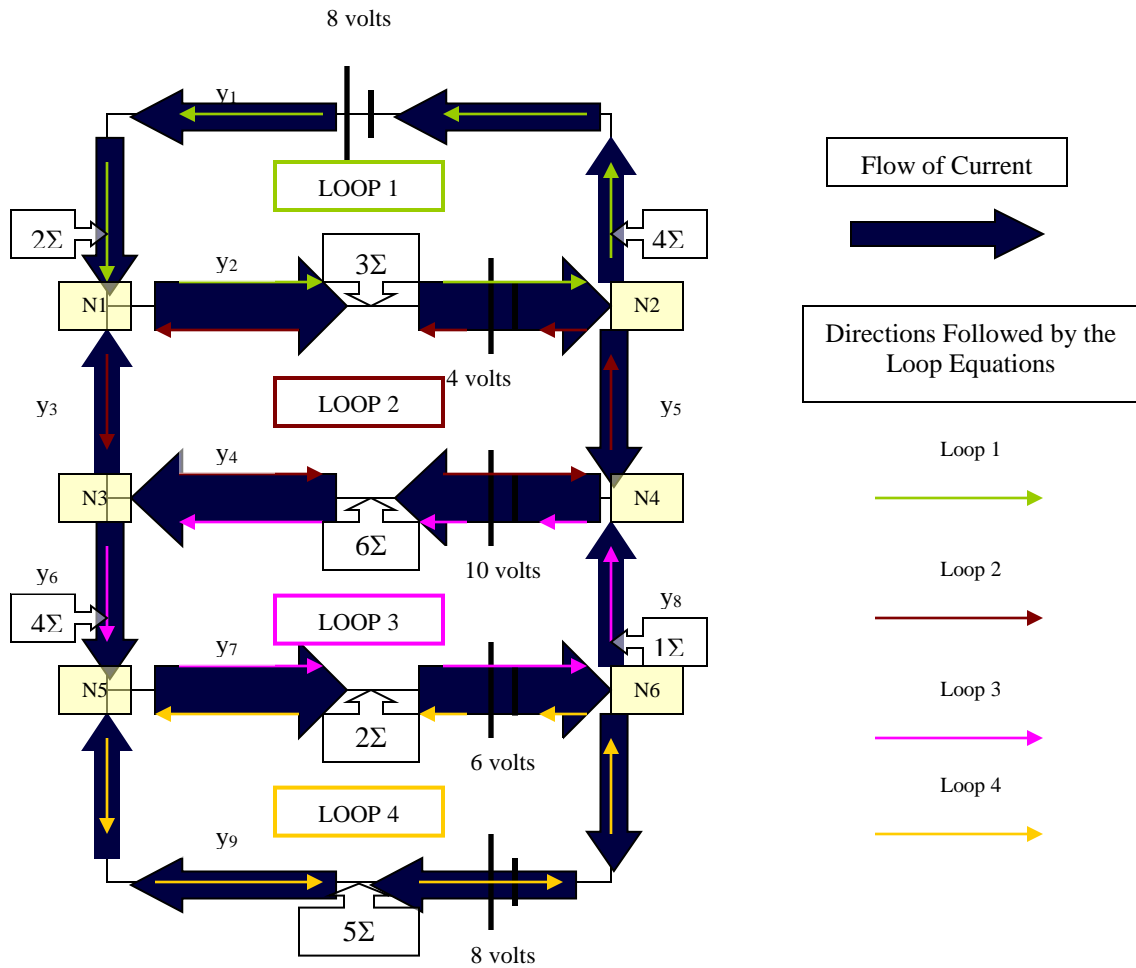


Page 11 # 5:



Equations:	
$y_1 + y_3 - y_2 = 0$	Node 1 (N₁)
$y_2 - y_1 - y_5 = 0$	Node 2 (N₂)
$y_4 - y_3 - y_6 = 0$	Node 3 (N₃)
$y_5 + y_8 - y_4 = 0$	Node 4 (N₄)
$y_6 + y_9 - y_7 = 0$	Node 5 (N₅)
$y_7 - y_8 - y_9 = 0$	Node 6 (N₆)
$2y_1 + 3y_2 + 4y_1 = 4$	Loop 1
$-3y_2 - 6y_4 = -6$	Loop 2
$6y_4 + 4y_6 + 2y_7 + y_8 = 0$	Loop 3
$-2y_7 - 5y_9 = -2$	Loop 4

Continuation: Page 11 #5

A									y	b
[1	-1	1	0	0	0	0	0	0]		[0]
[-1	1	0	0	-1	0	0	0	0]	[y1]	[0]
[0	0	-1	1	0	-1	0	0	0]	[y2]	[0]
[0	0	0	-1	1	0	0	1	0]	[y3]	[0]
[0	0	0	0	0	1	-1	0	1]	* [y4]	= [0]
[0	0	0	0	0	0	1	-1	-1]	[y5]	[0]
[6	3	0	0	0	0	0	0	0]	[y6]	[4]
[0	-3	0	-6	0	0	0	0	0]	[y7]	[-6]
[0	0	0	6	0	4	2	1	0]	[y8]	[4]
[0	0	0	0	0	0	-2	0	-5]	[y9]	[-2]

**Page 15 Extra Credit
(2-Paragraph Reading Response)**

The Level 3 title itself is easy to etch in memory because it tersely imparts the meaning, the function, and the importance of potential and current. It conveys the ever-present contributory role of potential that is made known by current, which makes the former pervasive.

The existence of the practical uses of potential and current in daily life are valuable lessons to learn. Potential seem to be an emergent factor: it is a variable with a tendency to amplify as it relates to current. An example of our understanding involves the part on mechanics: the movement or the motion is the potential and the force applied is manifested in currents. It is interesting to note that even in social interactions, these aspects are taken into account. With the given scenario on sports, the relationship of potential and current seem to be a case of probability or forecasting. It is motivating to find out that in an ideal setting, “the ubiquitous potential and the current connection” can be an instrument to gauge sufficiency that can prevent undue excess. With the paragraphs on matrix equation, it gave us a clearer picture of how $Ax = b - Ry$ relates the interaction of potential and current vectors when there is perpendicularity.

In our perspective, it is interesting to discover that there are issues involving the application of potentials in applied mathematics. Practically speaking, this can be probably drawn from the fact that realistically, there are facets of life that is beyond human control including personal circumstances. In addition to this, Mother Nature is one illustrative point that can challenge potentials: i.e. the dynamics of various forces like air pressure and friction on gravity.

The insights on potential and current have brought as to literally conclude that in the concrete world, minimal disruption means maximum potential in increased current.

Diagram and Essay by Irma Crespo