



Received: January 10, 2025; Accepted: February 20, 2025; Published: March 10, 2025

## General Knowledge 0.7 For Pin Number 6

Dagnachew Jenber<sup>1,2,\*</sup> and Fikreab Habtamu<sup>3</sup>

<sup>1</sup> Department of Mathematics, Bahir Dar University, Bahir Dar, Ethiopia.

<sup>2</sup> Department of Mathematics, Addis Ababa Science and Technology University, Addis Ababa, Ethiopia.

<sup>3</sup> Department of Chemistry, Bahir Dar University, Bahir Dar, Ethiopia.

\* Corresponding author: Dagnachew Jenber, dagnachew.Jenber@aastu.edu.et

### Abstract

This work presents 62 number of cards from different disciplines focused on english, physics and mathematics subject. The jester cards are prudent, lascivious, fatuous, force, cosine of  $n\pi$ ,  $n \in \mathbb{N}$  and exponent rule.

## 1 መግቢያ

አሁን ባለንበት ዘመን የአንባቢያን ማህበረሰብ እየቀነሰ መምጣት አሳሳቢ ደረጃ ላይ ደርሷል። በብዙ ምክኒያት ሰዎች ቁጭ ብለው ማንበብ የተውበት ጊዜ ነው። ለምሳሌ ጠቃሚ ያልሆነ ሶሻል ሚዲያ ላይና በአልባሌ ቦታወች ጊዜን ማጥፋት ከብዙወቹ ትንሾቹ ምክኒያቶች ናቸው። በ2017 ዓ.ም ዳኛቸው ለዚህ የሚሆን መፍትሄ ብሎ ያቀረበው 0 ወይም 1 ጩዋታ በሚል ርዕስ የተዘጋጀ ትልቅ አክሲዮን ማህበር አለ። ይህ አክሲዮን ማህበር ከላይ የተጠቀሰውን ችግር በሚከተሉት መልኩ መፍታት ይቻላል ብሎ ያምናል። በዚህ ፅሁፍ ውስጥ የተካተተው መፍትሄ አሳማኝ ሆኖ አግኝተነዋል (ለበለጠ መረጃ የ 0 ወይም 1 መመስረቻ ፅሁፍን ይመልከቱ)። በዚህ አክሲዮን ማህበር የቀረበውን መፍትሄ ባጭሩ እንደሚከተለው አስቀምጥነዋል።

- (1) ማንበብን ወይም ጥናትን መዝናኛና ገንዘብ ማግኛ እንዲሁም ደግሞ ሽልማት የሚያስገኝ ማድረግ። ከማጥኛ ወይም አዲስ እውቀትን ከማግኛ ዘዴወች ውስጥ አንደኛው ነገሮችን በተመሳሳይነት በማዛመድ

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ማወቅ ነው። ለምሳሌ የአንድ እንግሊዝኛ ቃል ብዙ ተመሳሳይ ቃላቶች አሉት። እነሱን በማዛመድ ለመሸምደድ መሞከር ጥሩ ከሚባሉት ዘዴወች ውስጥ አንዱ ነው። ግን ደግሞ ይሄን ልምምዶሽ አይረሴ ለማድረግ በጨዋታ መልክ ሆኖ በቡድን እየተዝናኑና እየተወያዩ ሲሆን ተመራጭ ያደርገዋል። ካርድ በማዘጋጀት የእንግሊዝኛ ቃላቶችን ማጥናት በሚል ዙሪያ የተጠኑ ሳይንሳዊ ጥናቶች አሉ (ለምሳሌ፣ እነዚህን ይመልከቱ፣ [1, 2, 3, 6, 7, 8, 9, 10, 12, 14])

- (2) ነገሮችን በአይነት አይነታቸው እያዛመዱ ማወቅ ያመራምራል፣ ጠያቂ ያደርጋል፣ ከጓደኛ ጋር ያከራክራል፣ ማመሳከሪያ መፅሃፍ ፍለጋ እስከመሄድ ድረስ ያደርሳል። እናም በዚህ መልክ ሲሆን ያን ነገር ለመርሳት ብዙ ጊዜ ይጨርሳል።
- (3) ማዛመድን ደግሞ ከጓደኛ ጋር ሆነው እየተዝናኑ በጨዋታ መልክ ካደረጉትና እውቀትንና ማወቅን ለማበረታት ደግሞ ለአሸናፊው ጉርሻ በመስጠት ከሆነ ጨዋታውም ተወዳጅ ይሆናል ማለት ነው።
- (4) ከላይ ከ1-3 የተጠቀሱትን መፍትሔወች ለማከናወን የተለያዩ አይነት አዝናኝ ጨዋታወችን ማዘጋጀት።

በዚህ ወረቀት ውስጥ፣ ለ 0 ወይም 1 ጨዋታ የሚሆን ካርድን አዘጋጅተናል። ያዘጋጀነው ካርድ ለጠቅላላ እውቀት 0.7 የሚሆን ሲሆን ከዚህ በፊት ያልተዘጋጁ ካርዶችን የሚዳስስ ነው። ያዘጋጀነውን የካርዶችን መረጃ ባጭሩ እንደሚከተለው ገልፀነዋል። የመርፌ ብዛት=6 እና  $k=7$  ቢሆኑ። ስለዚህ  $n=8*7+6=62$  ይሆናል። ስለዚህ አጫዋች ካርዶችን ጨምሮ ባጠቃላይ 62 ካርዶች አሉ። ተጫዋች ካርዶች፣  $62 - 6 = 56$  ካርዶች ይሆናሉ፤ 56 ደግሞ የ 8 ብዜት ነው (ለበለጠ መረጃ የዜሮ ወይም አንድ መመስረቻ ፅሁፍን ይመልከቱ)። አጫዋች ካርዶች የሚከተሉት ናቸው፤ prudent፣ lascivious፣ fatuous፣ force፣ cosine of  $n\pi$ ፣ እና exponent rule ናቸው።

## 2 አጫዋች ካርዶች (Jester Cards)

**Definition 2.1** (Prudent). *Acting with or showing care and thought for the future. (see, [4]).*

*Example: A prudent investor carefully studies market trends before making any financial decisions.*

**Definition 2.2** (Lascivious). *Feeling or revealing an overt and often offensive sexual desire. (see, [5]).*

*Example: The court ruled against the defendant due to his lascivious behavior toward his colleagues.*

**Definition 2.3** (Fatuous). *Silly and pointless; lacking intelligence or thought. (see, [4]).*

*Example: His fatuous remarks during the meeting annoyed his colleagues, as they added nothing meaningful to the discussion.*

**Definition 2.4** (Force (Physics)). *A vector quantity that causes an object to undergo a change in motion (acceleration), given by Newton's Second Law:  $F = ma$ , where  $F$  is force,  $m$  is mass, and  $a$  is acceleration. (see, [11]).*

*Example: The gravitational force acting on a falling apple pulls it toward the ground.*

**Definition 2.5** (Cosine Function (Mathematics)). *A trigonometric function defined as the ratio of the adjacent side to the hypotenuse in a right-angled triangle. For more see [13].*

*Example: The cosine of 60 degrees is 0.5.*

**Definition 2.6** (Exponent Rule (Mathematics)). (see, [15]). The rules governing exponentiation, such as:

- $a^m \cdot a^n = a^{m+n}$  (Product Rule)
- $\frac{a^m}{a^n} = a^{m-n}$  (Quotient Rule)
- $(a^m)^n = a^{mn}$  (Power Rule)

Example: Using the power rule,  $(2^3)^4 = 2^{3(4)} = 2^{12}$ .

### 3 ተጫዋች ካርዶች ከነጸጫዎቻቸው (Player Cards with their Jester)

1. prudent=careful=reasonable=cautious=circumspect=judicious=vigilant.
2. lascivious=lecherous=lewd=lustful=wanton=indecent=ribald=unchaste=obscene=salacious=depraved=libidinous=licentious=lubricious=prurient.
3. fatuous=silly=foolish=inane=witless=empty headed=pointless=preposterous=ludicrous=imbecilic=asinine=vacuous=frivolous=trivial=shallow=senseless=useless=purposeless=flippant=waggish=superficial=facetious=superficial=whimsical=skittish=flighty=flip-pant=vacuous.
4. force=(mass)x(acceleration)=a push or pull on an object=has the SI unit new-ton(N).
5. cosine of  $n\pi$ ,  $n \in \mathbb{N} = \cos(n\pi)$ ,  $n \in \mathbb{N} = (-1)^n$ ,  $n \in \mathbb{N}$ =example of alternating sequence.
6.  $a^{x+y}(bc)^z d^{-n} \left(\frac{e}{f}\right)^m (g^m)^n = (a^x)(a^y)(bc)^z d^{-n} \left(\frac{e}{f}\right)^m (g^{mn})$   
 $= (a^x)(a^y)(b^z c^z) \left(\frac{1}{d^n}\right) \left(\frac{e}{f}\right)^m (g^{mn}) = (a^x)(a^y)(b^z)(c^z) \left(\frac{1}{d^n}\right) \left(\frac{e^m}{f^m}\right) (g^{mn})$ .

## References

- [1] Aslan, Y. “Teaching vocabulary effectively through flashcards”. *International Journal of Arts & Sciences* 4.11 (2011), p. 347.
- [2] Azabdaftari, B. and Mozaheb, M. A. “Comparing vocabulary learning of EFL learners by using two different strategies: Mobile learning vs. flashcards.” *The Eurocall Review* 20.2 (2012), pp. 47–59.
- [3] Bryson, D. “Using flashcards to support your learning”. *Journal of visual communication in medicine* 35.1 (2012), pp. 25–29.
- [4] Dictionary, M.-W. “Merriam-webster”. *On-line at <http://www.mw.com/home.htm>* 8.2 (2002), p. 23.
- [5] Dictionary, O. E. “Oxford english dictionary”. *Simpson, Ja & Weiner, Esc* 3 (1989).

- [6] Kosim, N. “Improving the students’ vocabulary mastery through flashcards”. *Jurnal Pendidikan dan Pembelajaran* 2.9 (2013).
- [7] Nikoopour, J. and Kazemi, A. “Vocabulary learning through digitized & non-digitized flashcards delivery”. *Procedia-Social and Behavioral Sciences* 98 (2014), pp. 1366–1373.
- [8] Nugroho, Y. S., Nurkamto, J., and Sulistyowati, H. “Improving students’ vocabulary mastery using flashcards”. *English Education* 1.1 (2012), pp. 1–15.
- [9] Saputri, T. and Ramli, A. mardila. “Improving vocabulary mastery through flashcards in Sartika kindergarten Surabaya”. *International Conference on English Language Teaching (ICONELT 2017)*. Atlantis Press. 2017, pp. 214–218.
- [10] Senzaki, S., Hackathorn, J., Appleby, D. C., and Gurung, R. A. “Reinventing flashcards to increase student learning”. *Psychology Learning & Teaching* 16.3 (2017), pp. 353–368.
- [11] Serway, R. A., Jewett, J., and Peroomian, V. “Current and resistance”. *Physics for Scientists and Engineers with Modern Physics, 10th ed.; Cengage: Boston, MA, USA* (2018), pp. 691–712.
- [12] Sitompul, E. Y. “Teaching vocabulary using flashcards and word list”. *Journal of English and Education* 1.1 (2013), pp. 52–58.
- [13] Stewart, J. *Calculus: early transcendentals*. Cengage learning, 2012.
- [14] Wahyuni, S. and Yulaida, H. “Flashcards as a means to improve EFL learners’ vocabulary mastery”. *JEELS (Journal of English Education and Linguistics Studies)* 1.1 (2014), pp. 47–61.
- [15] Wilczynski, E. J. *College Algebra: With Applications*. Allyn and Bacon, 1916.