## OCTOBER 2021

# CIPHERTEXT PUZZLE AND GIVEAWAYS

Rigid Bits will be giving away prizes for participation throughout the events planned for Cybersecurity Awareness Month, this October. Learn more here: rigidbits.com/october

Join our weekly webinars for ways to win and clues that will help you crack our ciphertext puzzle.

#### WEBINAR ATTENDEE GIVEAWAYS

- Random drawings for live attendees of the following webinars:
  - HIPAA October 7<sup>th</sup> at 1 ET
    - \$150 Amazon Gift Card courtesy of Compliancy Group
  - $\circ \quad \text{Email Security} \text{October 14}^{\text{th}} \text{ at 1 ET}$ 
    - Free Email Threat Assessment with GreatHorn
  - o FBI October 21<sup>st</sup> at 1 ET
    - Free External Vulnerability Scan (up to 10 IPs) from Rigid Bits
  - o ID Theft October 28<sup>th</sup> at 1 ET
    - Free 1-Year ID Theft Protection with the defend-id Platinum Program

### CIPHERTEXT PUZZLE AND PRIZES

Can you decrypt this message?

#### GALWJ JWECNCWDGW

The first person to crack our ciphertext puzzle will win a \$100 Visa Gift Card.

Anyone that solves the puzzle by midnight October 31<sup>st</sup>, 2021 will be entered into a random drawing for a 2<sup>nd</sup> place giveaway of a \$50 Visa Gift Card.

Email solutions to **info@rigidbits.com** with your contact information to enter.

The game is open for anyone to play and only requires a little ingenuity and basic math (multiplying and adding). Or give your best shot at guessing with the clues!

People will absolutely be able to guess with our clues, but we'll share the method behind this to help give you an edge and a greater chance to win the grand prize. Read below for how to play or see our video explanation here.

### HOW IT WORKS

A cipher is a way of writing an encrypted message, which is called a ciphertext.

In our puzzle, we assign each letter a number.

А	В	С	D	Е	F	G	Н	Ι	J	К	L	Μ	Ν	0	Ρ	Q	R	S	Т	U	V	W	Х	Υ	Ζ
0	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

Two encryption keys are used to transform each letter into the ciphertext.

Ours uses simple arithmetic where the first key  $\alpha$  (alpha) is used to multiply, and the second  $\beta$  (beta) is added.

The equation would go as follows:  $\alpha x + \beta$ 

Ex: If the keys are  $\alpha$  = 7 and  $\beta$  = 11 and we want to use the equation to convert the letter D, as it's number: 3, we get:

 $\alpha$  (3) +  $\beta$  = 7 (3) + 11 = 21 + 11 = 32

When a number is larger than 25, you would use its remainder when divided by 26 to get a number in the range we're working with. So, 32 would then become 6, which is G.

That means D becomes G.

To create a ciphertext message, you would follow this process for each letter you need.

Decrypting this type of cipher works the same way with its own unique keys. Use the clues to figure out the keys and decrypt the full message to win. You may also be able to guess as more letters are decrypted.

Each week, a piece of the puzzle will be given as a clue to people that watch the live or recorded webinars. If you follow along, you can be sure to catch all of the clues and be the first to solve the puzzle and claim the \$100 Visa Gift Card.

By the end of October, all clues will allow anyone to solve the puzzle. If you're not first, you'll still be entered into a random drawing for a \$50 Visa Gift Card.

Email us at **info@rigidbits.com** if you think you have it solved with your contact information and the solution.

View the list of webinars here <u>rigidbits.com/October</u> – the Special Guest Webinars on Thursdays at 1pm ET will include the clue for that week.