

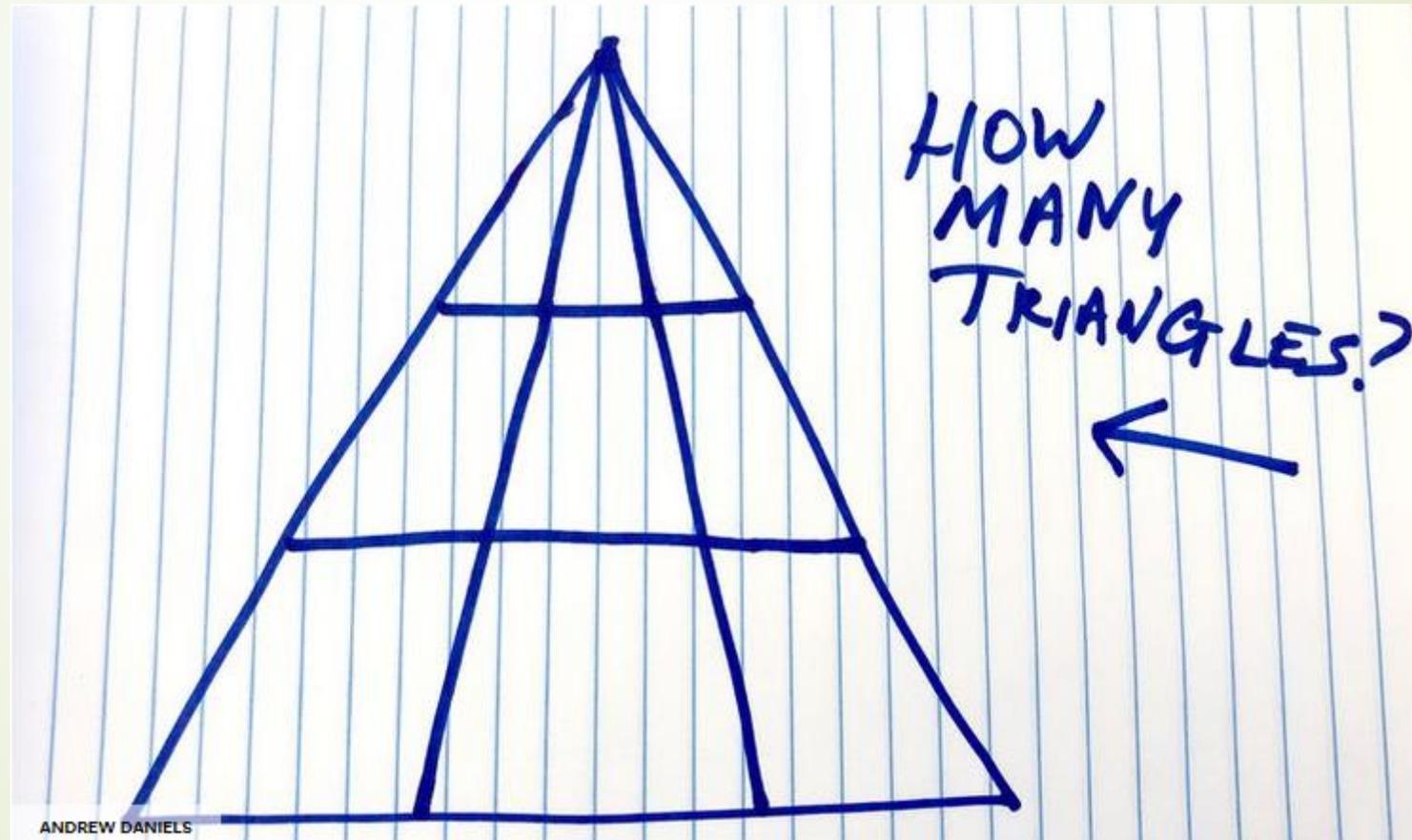


# Google – Security and Services

With backing up and more

Think about this while we talk about Google and more –answer at the end

Mathematicians reveal the real answer. See if you're right.



Remember this?





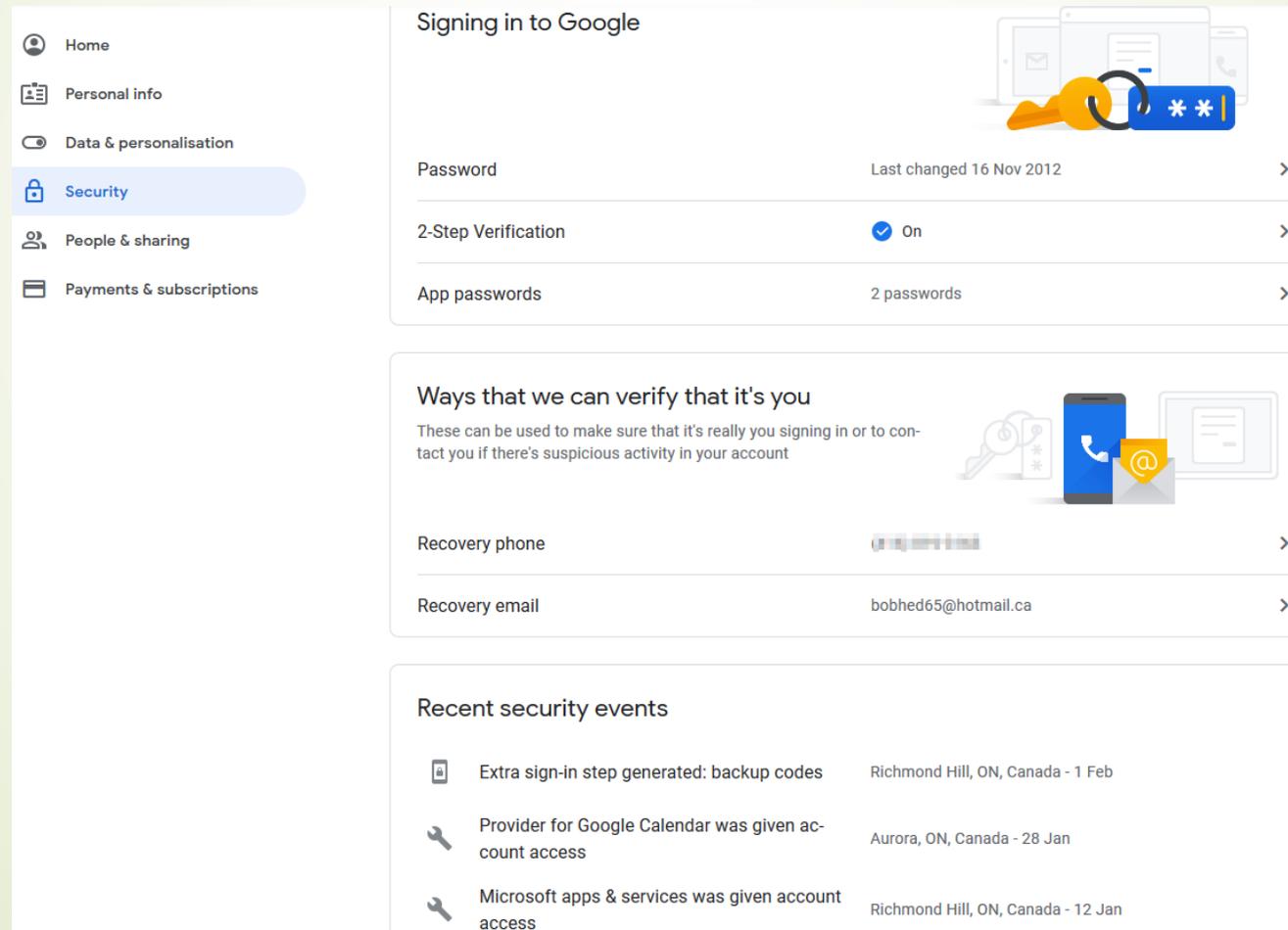
# Google – it knows a lot and can do a lot

Google makes it's money, a lot of it, through advertising. Think of how often you use Google Maps, YouTube, Gmail, Android or Google Search. Should you be concerned about privacy and if so what should you do to be safe?

So let's see what we can do to stay more secure!

Logon to your Google Account Page - <https://myaccount.google.com/>

- **Select the Security tab**
- **Add a Recovery Email Address and Phone Number**

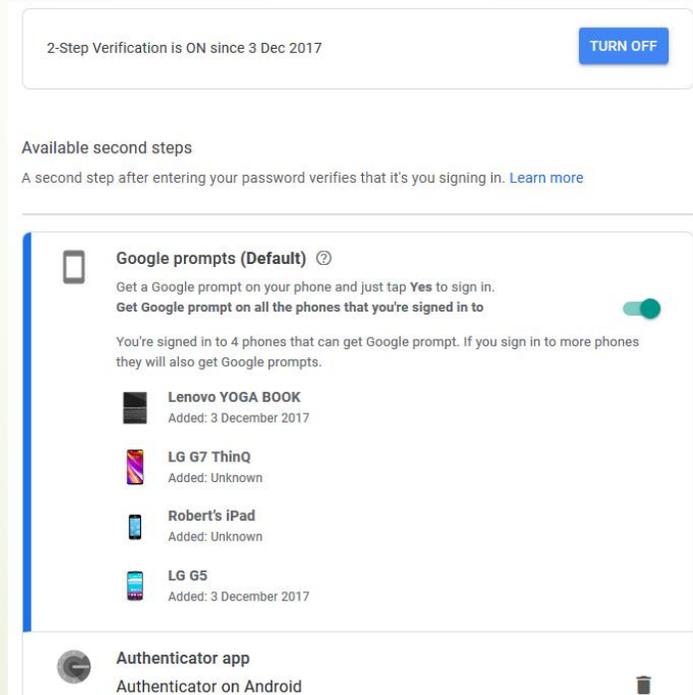


The screenshot shows the Google Account Security page. On the left is a navigation menu with the following items: Home, Personal info, Data & personalisation, Security (highlighted in blue), People & sharing, and Payments & subscriptions. The main content area is divided into three sections:

- Signing in to Google**: This section includes a header with a key icon and a list of security settings:
  - Password: Last changed 16 Nov 2012
  - 2-Step Verification: On
  - App passwords: 2 passwords
- Ways that we can verify that it's you**: This section includes a header with a smartphone and key icon, a sub-header "These can be used to make sure that it's really you signing in or to contact you if there's suspicious activity in your account", and a list of recovery options:
  - Recovery phone: [Redacted]
  - Recovery email: bobhed65@hotmail.ca
- Recent security events**: This section lists recent security events:
  - Extra sign-in step generated: backup codes (Richmond Hill, ON, Canada - 1 Feb)
  - Provider for Google Calendar was given account access (Aurora, ON, Canada - 28 Jan)
  - Microsoft apps & services was given account access (Richmond Hill, ON, Canada - 12 Jan)

# Set Up Two-Step Verification

1. Visit the **Security** page from the sidebar.
2. Under the **Signing in to Google** section, click on **2-Step Verification**.
3. On the next screen, click on the **Get Started** button.





# Print Backup Codes

	<b>Authenticator app</b> Authenticator on Android Added: 11 November 2019	
	<a href="#">CHANGE PHONE</a>	
	<b>Voice or text message</b> (  Verified)	
	Verification codes are sent by text message.	
	<a href="#">ADD PHONE</a>	
	<b>Backup codes</b> 10 single-use codes are active at this time, but you can generate more as needed.	
	<a href="#">SHOW CODES</a>	

# Control What You Share on Google

**People & sharing**  
People that you interact with and the info that you make visible on Google services

**Contacts**  
Organise your Google contacts so that you can connect with people on Google services, such as Gmail

- Contacts** 228 contacts  
+ other contacts for auto-complete suggestions
- Contact info saved from interactions**  On
- Contact info from your devices**  On
- Blocked** No blocked users

**Location sharing**  
You aren't sharing your real-time location with anyone on Google

**Choose what others see**

- About me**  
What personal info that you make visible to others across Google services

[Manage location sharing](#)

# Revoke Access From Third-Party Apps You Don't Use

## Third-party apps with account access

You gave these sites and apps access to some of your Google Account data, including info that may be sensitive. Remove access for those that you no longer trust or use.



**Amazon Alexa**

Has access to Google Calendar



**macOS**

Has access to Gmail, Google Calendar, Google Contacts, Google Hangouts



**Microsoft Outlook: Organize Your Email & Calendar**

Has access to Gmail, Google Calendar, Google Contacts, Google Drive

+3 more

[Manage third-party access](#)



# Google Free Services

- ▶ G Pay
- ▶ Google Docs – Docs, Sheets, Slides, Forms
- ▶ Google Earth
- ▶ Gmail
- ▶ Google Maps
- ▶ Google News
- ▶ Google Scholar
- ▶ Google Duo
- ▶ Google Translate
- ▶ Google Photos
- ▶ Many more - [https://en.wikipedia.org/wiki/Category:Google\\_services](https://en.wikipedia.org/wiki/Category:Google_services)

# What does Google know about you?

- ▶ To its credit, Google doesn't shy away from letting users know what data it collects and why. Its "[Your Data](#)" privacy page explains that it tracks things you create, such as emails, contacts you add, calendar events and photos you upload.
- ▶ It also keeps your name, email address, birthday, gender, phone number and country. It collects data on what videos you watch, the ads you click, your location, device information, and IP address and cookie data. It says it does this to "make [its] services work better for you, which is true: If you block everything you also block Google's ability to show you more content it thinks you'll like. Google even lets users download all of their data, including photos, emails, contacts, bookmarks and more, so you can "copy, back it up or even move it to another service."
- ▶ Google promises that it keeps all of this data safe during transit between your computer or smartphone and its servers. It also says that its cloud infrastructure protects that data, and that it doesn't give governments "direct access" or "backdoor access" to any information. Google provides a [public transparency report](#) on all requests and other issues that might affect users.
- ▶ Finally, Google promises that it doesn't sell your data, but rather uses your information to "make ads relevant" while you're browsing the web. It says it doesn't hand over any of this information to advertisers.



# Backing up your data

- ▶ You can let Google help you with this – Google Backup & Sync
- ▶ You can use the facility that is built into Windows 10 – File History
- ▶ There are other programs that will backup your data. Some come with external hard drives
- ▶ You can use external storage or cloud or some combination of both
- ▶ One cloud solution that is easy to setup is OneDrive, it comes with Windows 10. Use it with your Microsoft account
- ▶ One member asked “what is the difference between an incremental and differential backup and which should I be using?”



# Google Backup and Sync

- ▶ 15 GB of free storage and unlimited storage for your “high quality” photos, that is photos up to 16 MB in size
- ▶ Your data is accessible at [drive.google.com](https://drive.google.com) from any device
- ▶ You select what you wish to backup
- ▶ There is a Google Drive folder on your PC, you decide what is synced



# Windows 10 File History

- Setup to backup to external hard drive or network drive
- You decide what you wish to backup
- Setup through Settings, Update and security, Backup
- You recover files through File History – under Backup options click “Restore files from a current backup”
- You can also restore an earlier version of a file through File explorer
- Open File explorer, select the file want a version of and click history on the Home tab

# Windows Backup software

- Reference - <https://www.pcworld.com/article/3201971/best-windows-backup-software.html>

▶ <b>Acronis True Image 2019</b> ★★★★★ Read PCWorld's review	<b>\$49.99</b> on Amazon (Prime Eligible)	See It
▶ <b>EaseUS ToDo Backup Home 10.5</b> ★★★★★ Read PCWorld's review	<b>\$29.99</b> on EaseUS	See It
▶ <b>Cobian Backup 11</b> ★★★★★ Read PCWorld's review	on <a href="https://www.cobiansoft.com/">https://www.cobiansoft.com/</a>	Learn More
▶ <b>ShadowMaker Pro 2.0</b> ★★★★★ Read PCWorld's review	<b>\$29.00</b> on MiniTool	See It
▶ <b>Aomei Backupper Standard 4</b> ★★★★★ Read PCWorld's review	<b>\$0.00</b> on Aomei	See It
▶ <b>Paragon Backup &amp; Recovery 16 Free Edition</b> ★★★★★ Read PCWorld's review	<b>\$0.00</b> on <a href="https://www.paragon-software.com/">https://www.paragon-software.com/</a>	See It
▶ <b>CloudBerry Backup Desktop</b> ★★★★★ Read PCWorld's review	<b>\$49.99</b> on CloudBerry Backup Desktop	See It
▶ <b>Macrium Reflect Free 6</b> ★★★★★ Read PCWorld's review	<b>\$0.00</b> on <a href="https://www.macrium.com/">https://www.macrium.com/</a>	See It

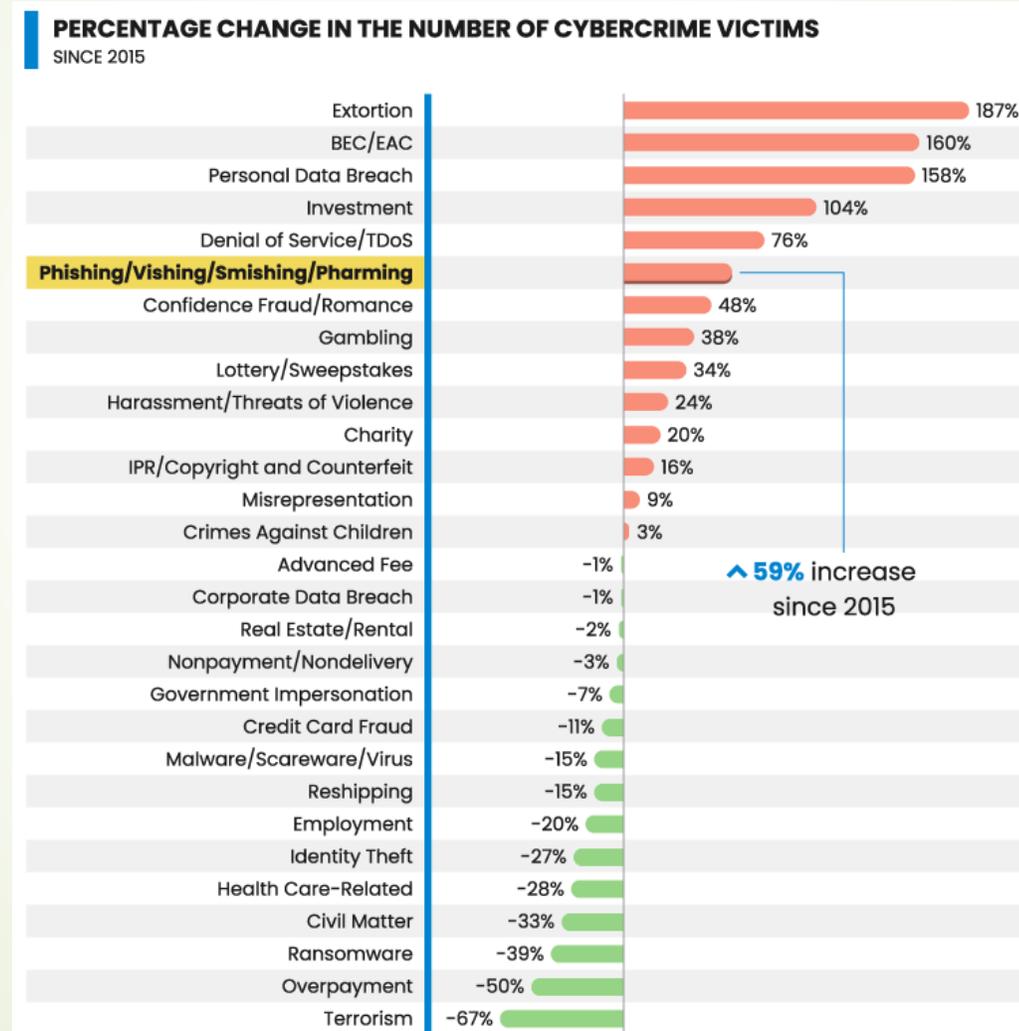
# Backups – Differential/Incremental

- In most cases don't worry about it, your software solution takes care of it.
- A differential backup backs up only the files that changed since the last full backup
- An incremental backup only backs up the data that has changed since the last backup -- be it a full or incremental backup

Backup Strategy	Backup Basis	Backup Speed	Space Taken	Similarity	Media Required for Recovery
Full Backup	Full Backup	Slow	Big	/	Most recent backup only
Differential Backup	Full Backup	Medium	Big	Backup only files that have changed	Most recent full + most recent differential
Incremental Backup	Last Backup of Any Type	Fast	Small		Most recent full + all incremental since full

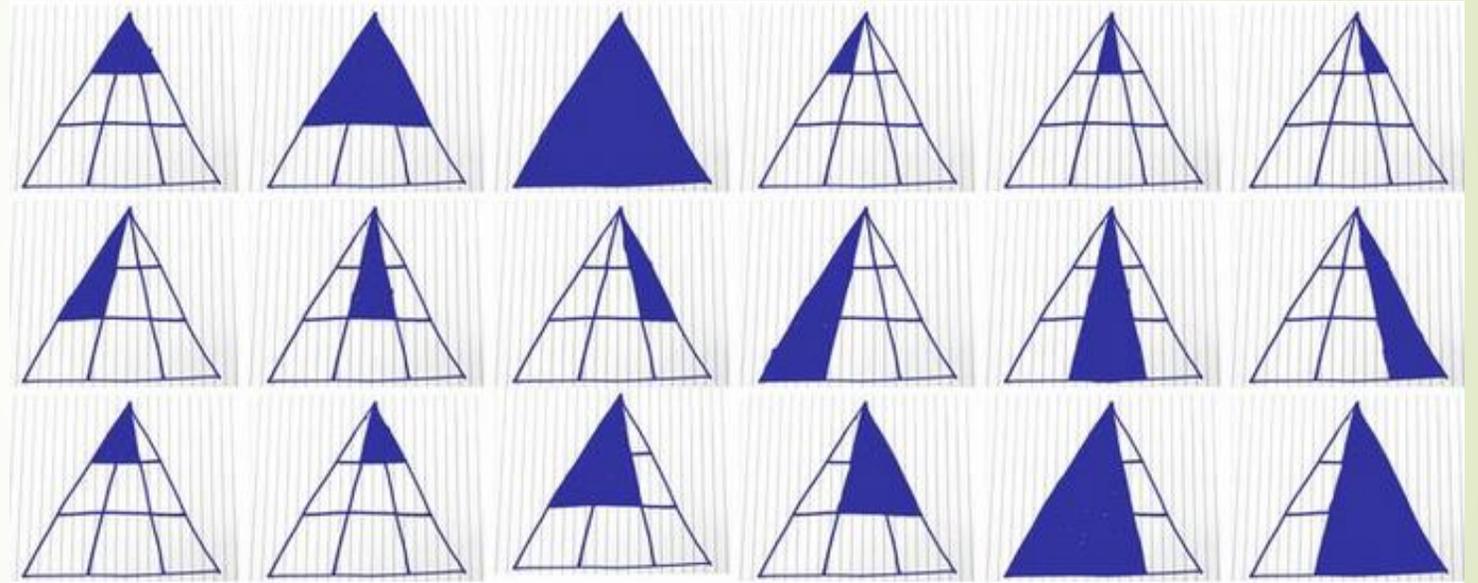
# Are Cyber Crimes Increasing?

➤ <https://www.security.org/>



# How many triangles?

- Remember high school math? That's  $n(n-1)/2$ . And since there are  $p$  horizontal lines, says Bonahan, this gives  $p n(n-1)/2$  possible triangles. In our case, that's  $3 \times 4(4-1)/2 = 18$





# Questions/Comments?

- ▶ Valuable, too much detail or about right?
  - ▶ As always we look for topics of interest to everybody and need your ideas
  - ▶ We are always looking for members who would like to speak to us about any technology related topic
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