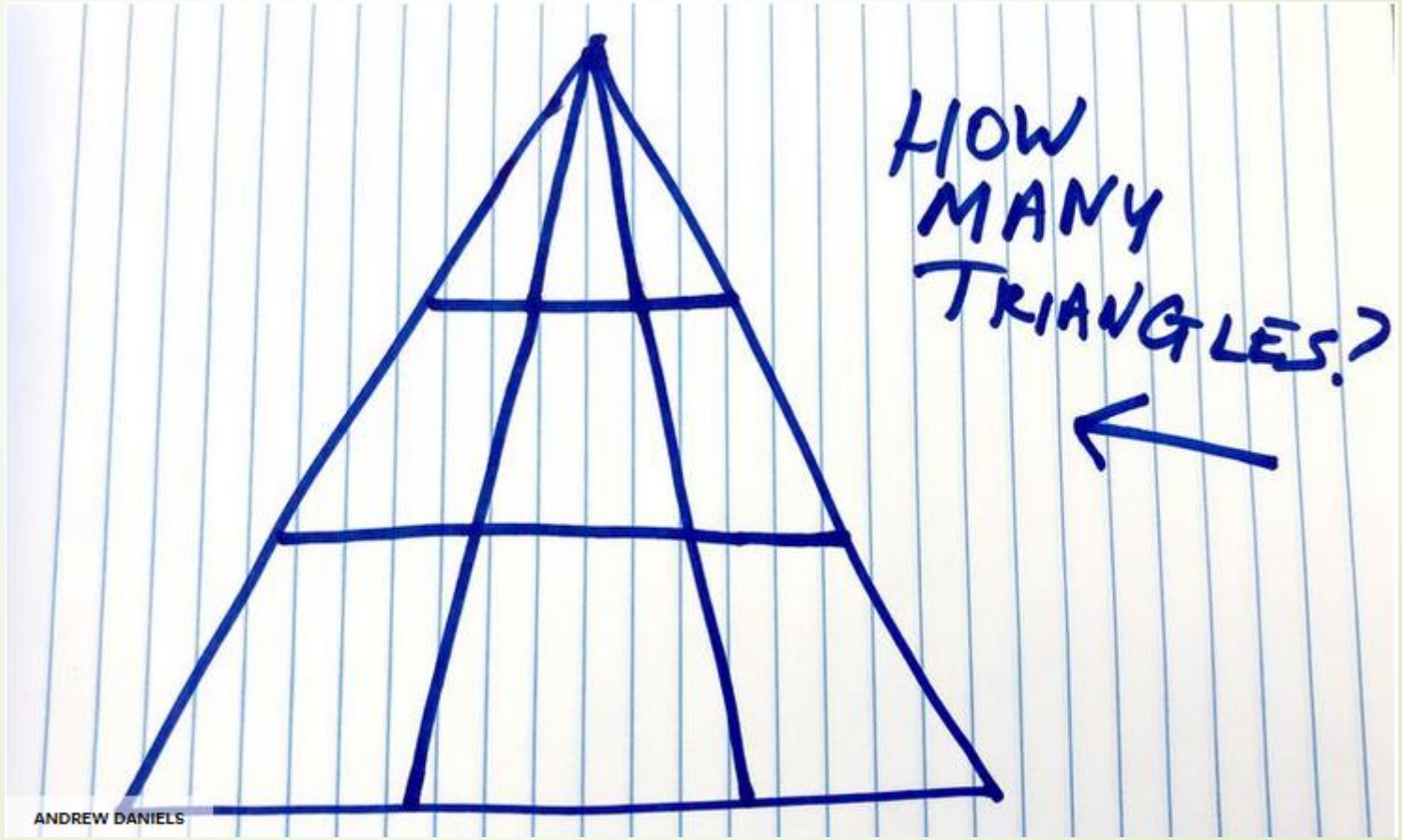
Google – Security and Services

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?

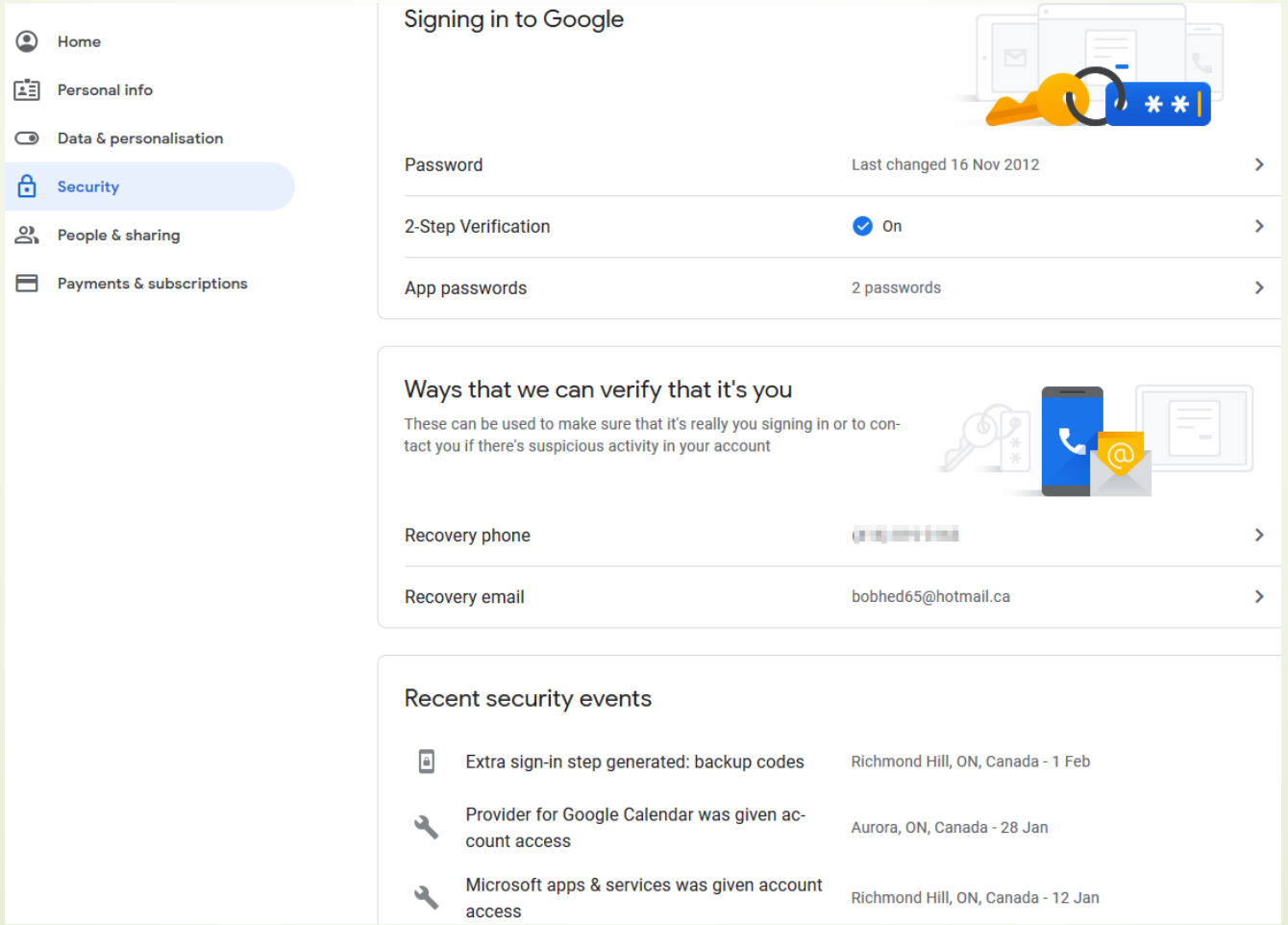
Google – it knows a lot and can do a lot

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!

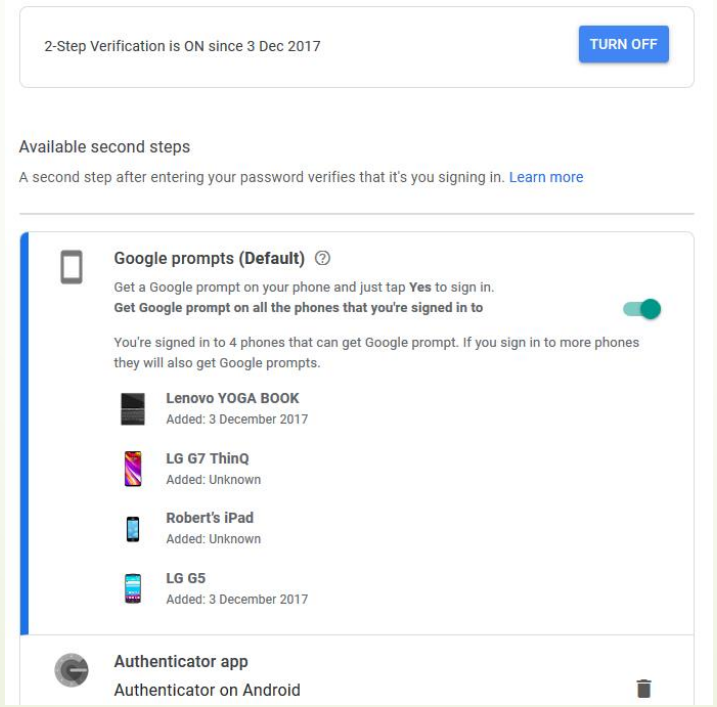
Logon to your Google Account Page - https://myaccount.google.com/

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

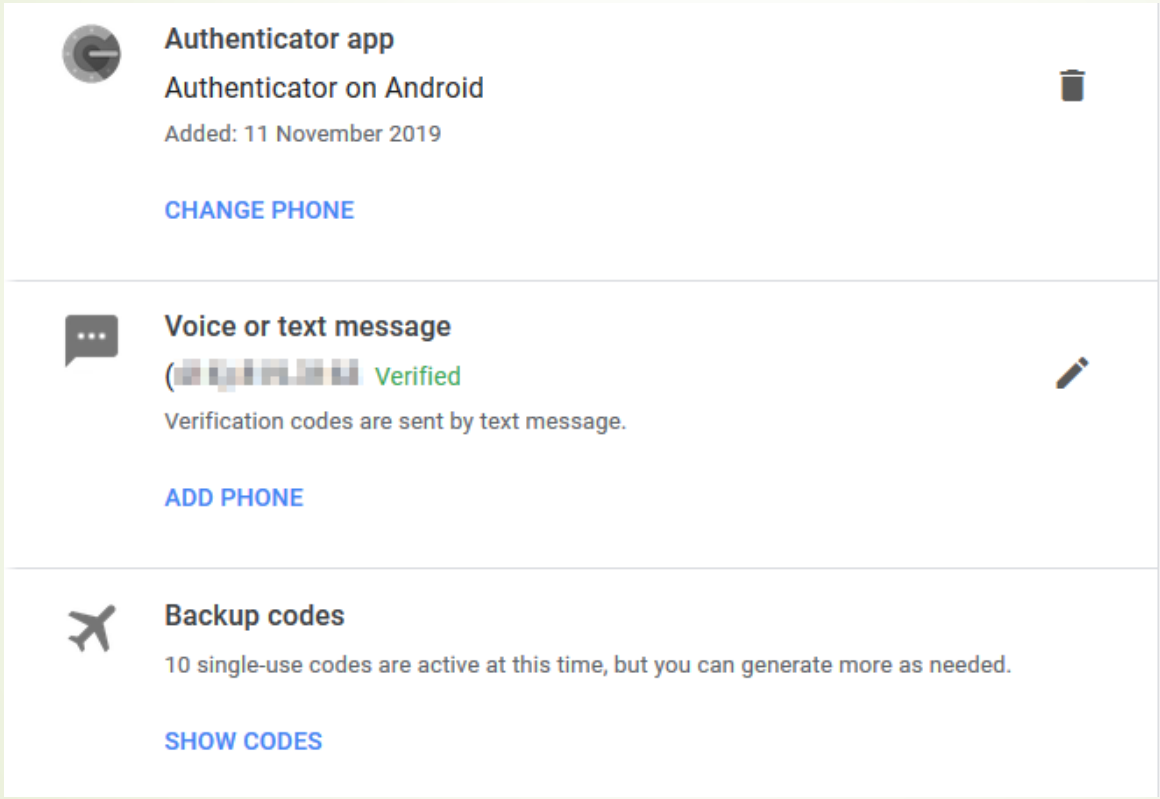


Set Up Two-Step Verification

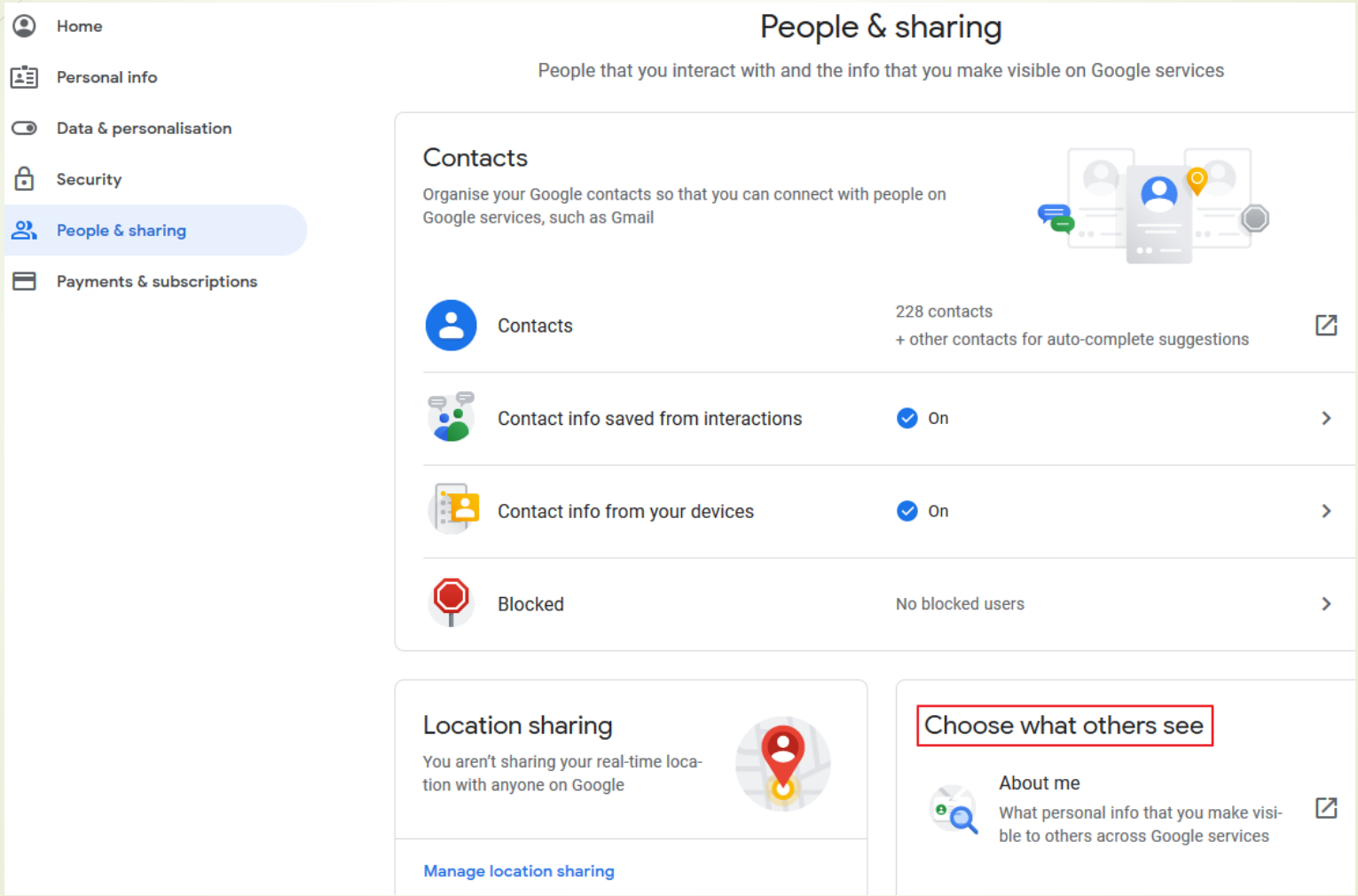
1. Visit the **Security** page from the sidebar.
2. Under the **Signing in to Google** section, click on **2-Step Verification**.
3. On the next screen, click on the **Get Started** button.



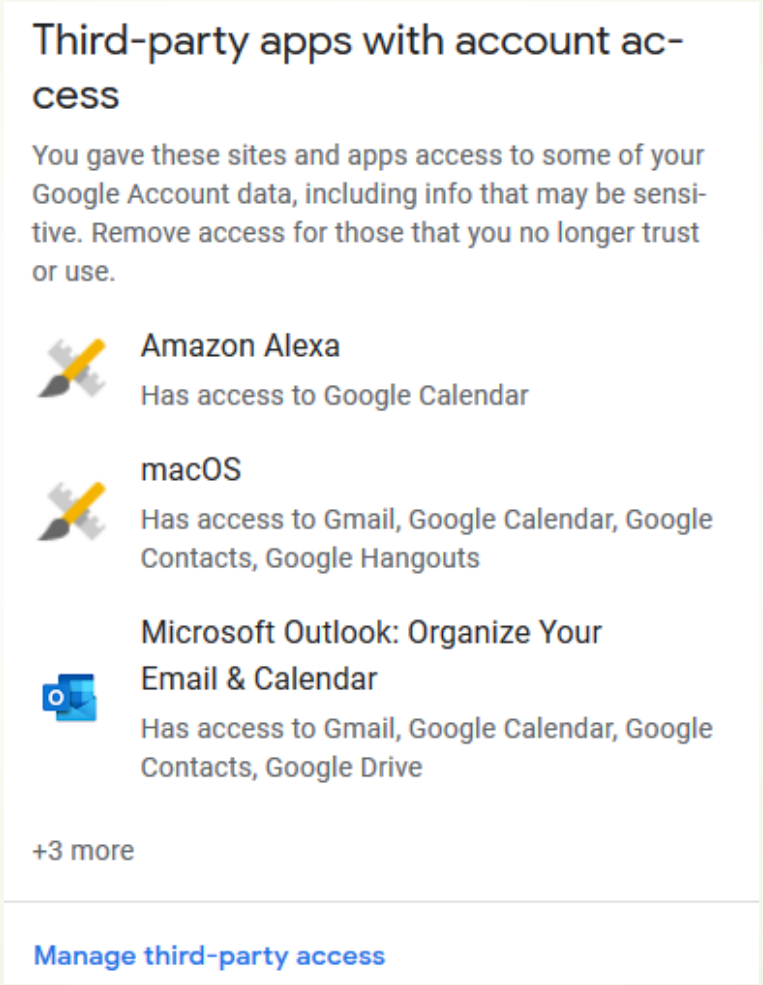
Print Backup Codes



Control What You Share on Google



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



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

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

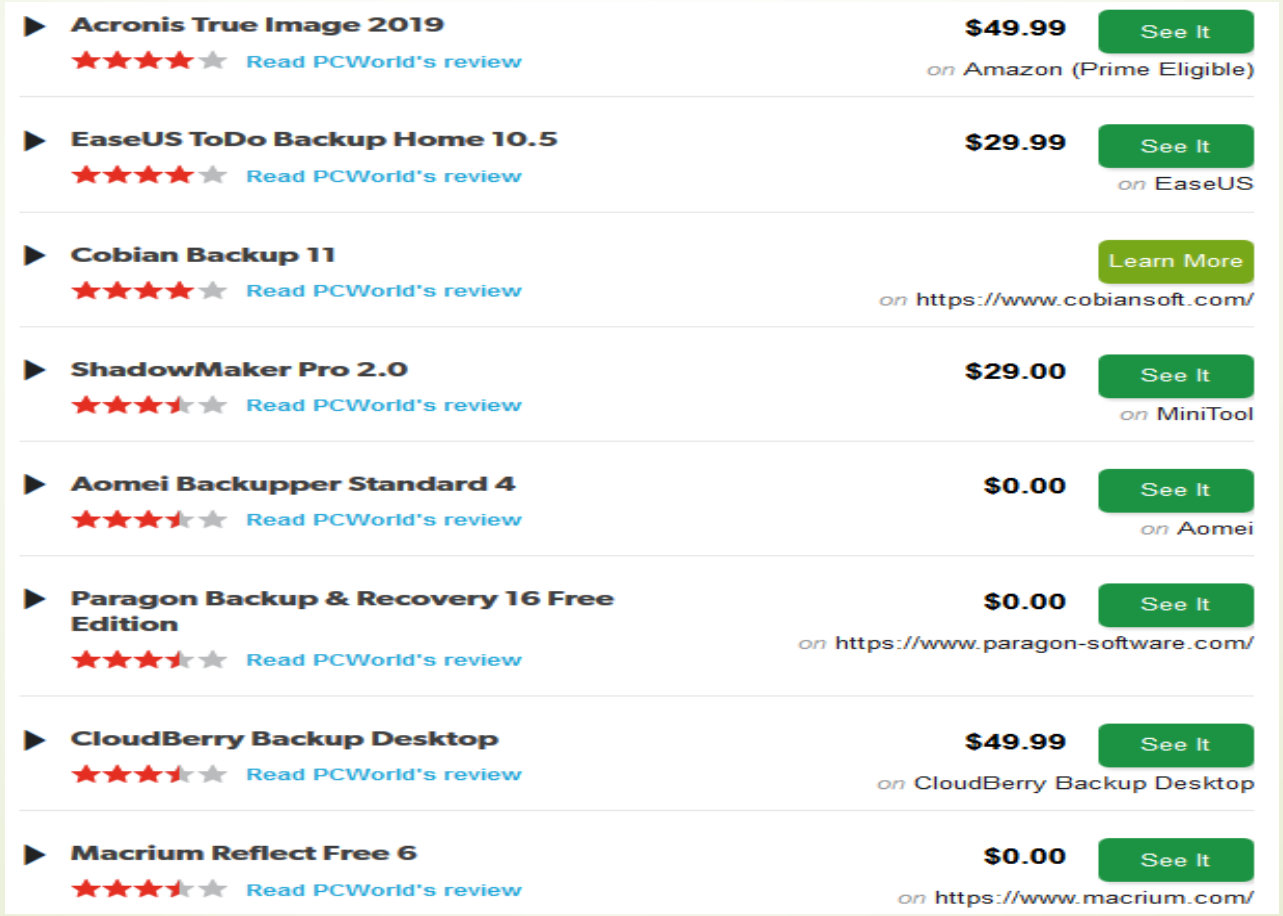
- 15 GB of free storage and unlimited storage for your “high quality” photos, that is photos up to 16 MB in size
- Your data is accessible at drive.google.com from any device
- You select what you wish to backup
- There is a Google Drive folder on your PC, you decide what is synced

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



Acronis True Image 2019 ★★★★☆ Read PCWorld's review	**$49.99**	See It on Amazon (Prime Eligible)
EaseUS ToDo Backup Home 10.5 ★★★★☆ Read PCWorld's review	**$29.99**	See It on EaseUS
Cobian Backup 11 ★★★★☆ Read PCWorld's review		Learn More on https://www.cobiansoft.com/
ShadowMaker Pro 2.0 ★★★½☆ Read PCWorld's review	**$29.00**	See It on MiniTool
Aomei Backupper Standard 4 ★★★½☆ Read PCWorld's review	**$0.00**	See It on Aomei
Paragon Backup & Recovery 16 Free Edition ★★★½☆ Read PCWorld's review	**$0.00**	See It on https://www.paragon-software.com/
CloudBerry Backup Desktop ★★★½☆ Read PCWorld's review	**$49.99**	See It on CloudBerry Backup Desktop
Macrium Reflect Free 6 ★★★½☆ Read PCWorld's review	**$0.00**	See It on https://www.macrium.com/

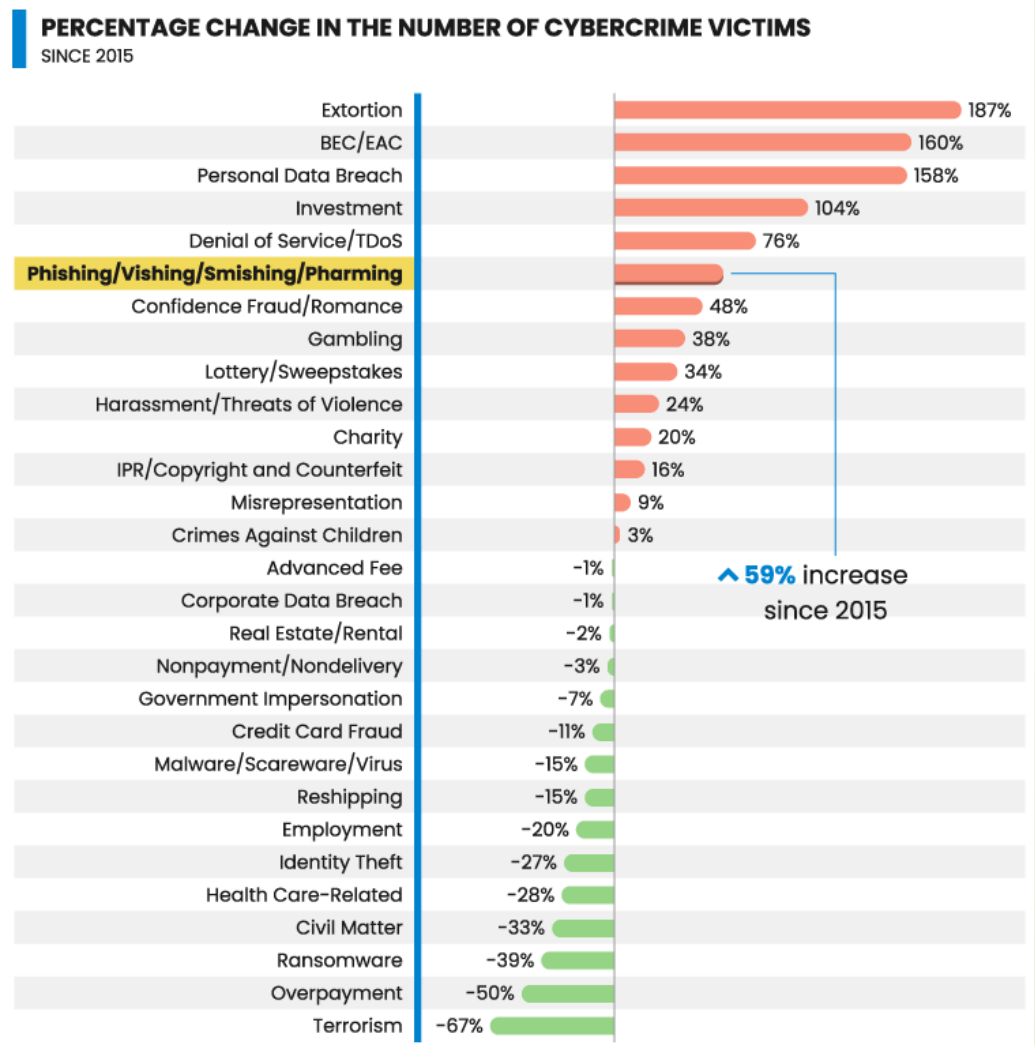
Backups – Differential/Incremental

- 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

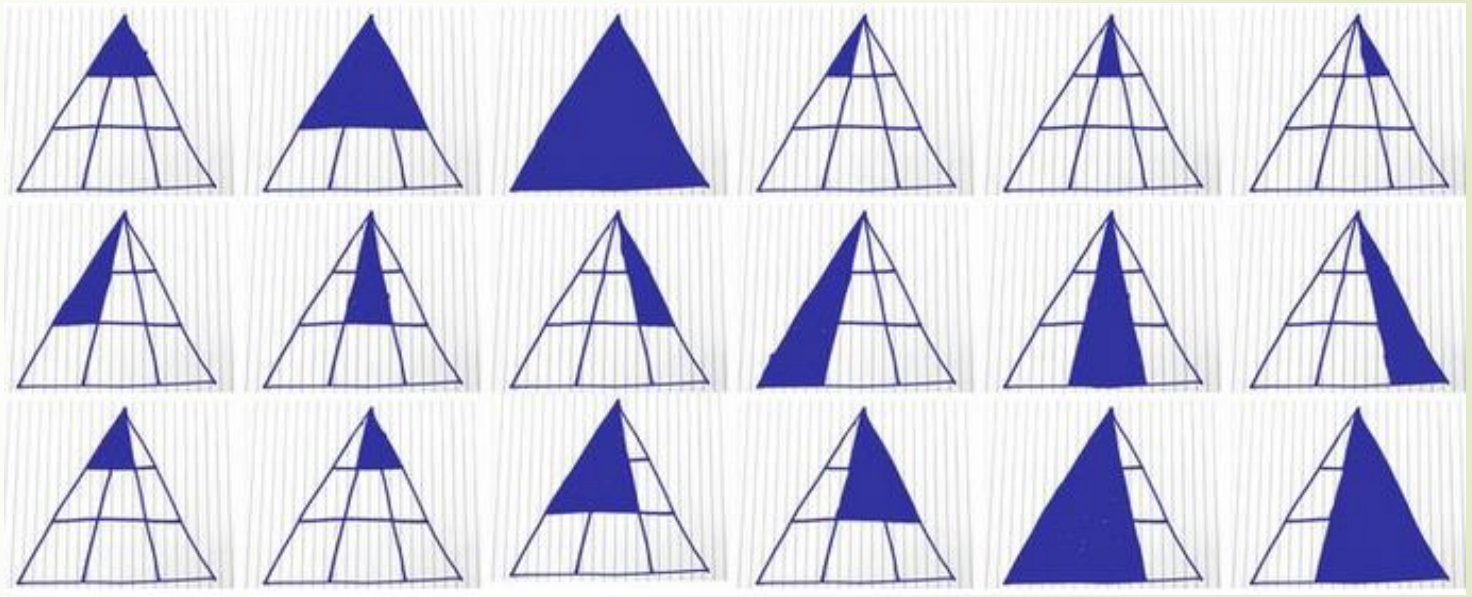
Are Cyber Crimes Increasing?

- 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 $3x4(4-1)/\ 2=18$



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