What’s the Difference Between Megabits and Megabytes?

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What's the Difference?

If you're looking at your internet plan or downloading a file and wondering why the numbers don’t seem to match up — you’re not alone. The terms **megabits (Mb)** and **megabytes (MB)** look and sound similar, but they mean different things.

Here’s the key difference:

Term	Stands For	Used When Talking About...
Megabit	**Mb**	Internet **speed**
Megabyte	**MB**	File or **download size**

Megabits per Second - This measures **internet speed**, and you'll see it in:

- **Internet speed tests** (e.g., Speedtest.net, Fast.com)
  → "*Download speed = 497 Mbps and Upload speed = 503Mbps*"
- **Broadband Provider advertisements or plans**
  → "*Up to 300 Mbps download!*"

Megabytes per Second - This measures **file download or transfer speed**, and you'll see it in:

- **Download progress bars** (Steam, Xbox, PlayStation, etc.)
  → "*Downloading at 80 MB/s*"
- **Web browser downloads**
  → "*Downloaded 200 MB in 5 seconds*"

Quick Tip

To get **megabytes per second (MBps)** from your internet speed in **megabits per second (Mbps)**, just divide by **8**.

Example:

Your online speed test shows that your PC is getting **800 megabits per second (Mbps)** of internet speed, but your game file is downloading at **100 megabytes per second (MBps)**. At first, this can look like a mismatch — the numbers are different, and the terms **Mbps** and **MBps** look almost the same.

However, you're actually getting the **full expected speed**.

Remember 1 megabyte (MB) = 8 megabits (Mb)
So, if you divide 800 Mbps by 8, you get **100 MBps** as the theoretical max download rate.