



Calculating Download Time

How long to download a **10MB** file over a **5Mb/s** connection?

We need the file and the speed to be the same units of measurement.

5Mb/s (Megabits per second) means you can download 625 Kilobytes per second (KB/s), or 0.625 Megabytes per second (MB/s). Remember, **8 bits equal 1 byte**, so to work it out you need to divide it by 8.

So our equation is:

5 Megabits per second / 8 = 0.625 Megabytes per second.

REMEMBER

LARGER TO SMALLER = MULTIPLY

SMALLER TO LARGER = DIVIDE



So to download a 10 Megabyte (MB) file on a 5Mb/s connection, it will take you 16 seconds to download. (10 Megabytes / 0.625 Megabytes per second = 16 seconds to download the file). All you need to remember is this simple formula:

- File Size *In Megabytes* / (Download Speed *In Megabits* / 8) = Time *In Seconds*

10 Megabytes / 0.625 Megabytes per second = 16 seconds

A 15 Megabyte file, downloading at 10 Megabits per second is **15 / (10/8) = 12 seconds**