

QUANTITY OF INFORMATION

1. How many bytes can be stored on a CD of 700 MB?
2. How many kB can be stored on a CD of 800 MB?
3. A book has on average 2500 characters per page. We know that a character is stored in a byte. How many book pages fit on a floppy disk 1440 kB? But on a 700 MB CD? But on a 4 GB DVD?
4. If a book of 220 pages is on average 2000 characters per page and a character is stored in a byte, what size should be the device needed to store 350 books?
5. How many characters per page has a book of 500 pages stored on a file of 1MiB (we know that one character is stored on 8 bytes)?
6. How many books of 512 pages (2560 characters per page, a character is stored in a byte) can be stored on a CD of 700 MB? But on 4 GB DVD?
7. How many medical images with the average size of 150 kiB can be stored on a CD of 700 MiB? But on an 800 MB CD? But on a 4 GB DVD?
8. Find the solution for the following operations:
 - a. $120 \text{ kb} + 120 \text{ kb} = \dots\dots\dots \text{ byte}$
 - b. $200 \text{ kB} + 1024 \text{ B} = \dots\dots\dots \text{ kB}$
 - c. $100 \text{ Mb} + 1000 \text{ KB} + 1 \text{ GB} = \dots\dots\dots \text{ KB}$
 - d. $120 \text{ Kb} + 120 \text{ Kb} = \dots\dots\dots \text{ B}$
 - e. $128 \text{ B} + 1020 \text{ B} = \dots\dots\dots \text{ kb}$