LU04.A03 - Storage capacity of a blank DVD disc

Initial situation

You buy a single-layer blank DVD disc in a shop. The packaging says 8.4 GB. You know from your ICT lessons that the information on the packaging is a technical interpretation (1KB = 1000 bytes).

Vielfache zur Basis 2			Vielfache zur Basis 10		
1 Byte [B]	= 2^3 bit	= 8 bit	1 Byte [B]	= 2^3 bit	= 8 bit
1 Kibibyte [KiB]	= 2^{10} Byte	= 1.024 B	1 Kilobyte [KB]	= 10^3 Byte	= 1.000 B
1 Mebibyte [MiB]	= 2^{20} Byte	= 1.048.576 B	1 Megabyte [MB]	= 10^6 Byte	= 1.000.000 B
1 Gibibyte [GiB]	= 2^{30} Byte	= 1.073.741.824 B	1 Gigabyte [GB]	= 10^9 Byte	= $1{,}0 \cdot 10^9$ B
1 Tebibyte [TiB]	= 2^{40} Byte	= $1{,}0995 \cdot 10^{12}$ B	1 Terabyte [TB]	= 10^{12} Byte	= $1{,}0 \cdot 10^{12}$ B
1 Pebibyte [PiB]	= 2^{50} Byte	= $1{,}1259 \cdot 10^{15}$ B	1 Petabyte [PB]	= 10^{15} Byte	= $1{,}0 \cdot 10^{15}$ B

Task

1. What does a computer display that interprets the memory size in binary (1KiB = 1024 bytes)? (The result is correctly rounded to one digit)

General conditions

What	Description
Product:	Your answers are written.
Time:	20 min.
Social form:	Individual or partner work
Work equipment:	Office or paper/writing utensils, script