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