Exercises

The following two questions relate to dials that have 10 different states, as discussed in the previous slide.

► Given a machine that uses 4 dials, how many different numbers can we represent?

► If we want to represent 256 different values, how many dials do we need?

Exercises

▶ How many different values can we represent with a byte?

▶ If we want to represent 30 different values, how many bits would we need?

Exercises

- ▶ What is the decimal equivalent of 101111?

- ▶ What is the binary equivalent of 123?

Exercises

▶ Which has more bytes, 1KB or 1KiB?

▶ How many bytes are in 128MB?

Exercises

Which of the following sequences is arranged in descending order of memory capacity (i.e. from the largest memory capacity to the smallest)?

a) 1 MB, 1 GB, 1 GiB, 1 TB, 1 TiB

b) 1 GB, 1 GiB, 1 TB, 1 TiB, 1 MB

c) 1 TB, 1 TiB, 1 GB, 1 GiB, 1 MB

d) 1 TiB, 1 TB, 1 GiB, 1 GB, 1 MB

e) 1 MB, 1 GiB, 1 GB, 1 TiB, 1 TB