1. Draw the correct frequency spectrum of attached signals.

sinus.eps spectrum.eps

konst.eps spectrum.eps

1. Assign the corresponding frequency spectrum for each signal in time domain.

|  |  |  |  |
| --- | --- | --- | --- |
| a)  (5) | sign1.eps | **1)**  **(b)** | spekrum2.eps |
| b)  (1) | sign2.eps | **2)**  **(d)** | spekrum4.eps |
| c)  (4) | sign3.eps | **3)**  **(e)** | spekrum5.eps |
| d)  (2) | sign4.eps | **4)**  **(c)** | spekrum3.eps |
| e)  (3) | sign5.eps | **5)**  **(a)** | spekrum1.eps |

1. Fill the next image with key operations used for the analog signal processing and describe relevant axis. Further complete the table in relation to the shown signal.

quantization

coding

sampling

quantization

vzor_kvan_kod.eps

level

for example U

time (t)

001 010 100 101 101 011 010 100 101 110

1 2 4 5 5 3 2 4 5 6

coding

1. Determine the correct sequence of operations (1 – first, 2 – second, 3 – last).

\_2\_\_ quantization

\_3\_\_ coding

\_1\_\_ sampling