



Course: Digital Engineering

Semester: 1st term 2025/2026.

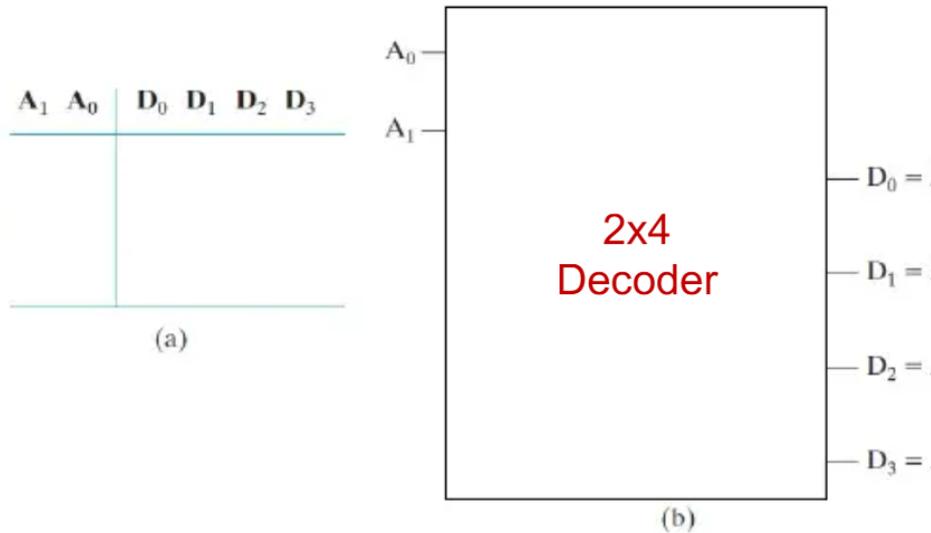
Lecturers: Dr. Osama Elnahas, Dr. Dina Abdelhafiz, Dr. Bassant Tolba, Dr. Radwa Rady

Assistant: Eng. Rania Helal, Eng. Assma, Eng. Israa Mohsen, Eng. Ahmed Kamel, Eng. Belal,

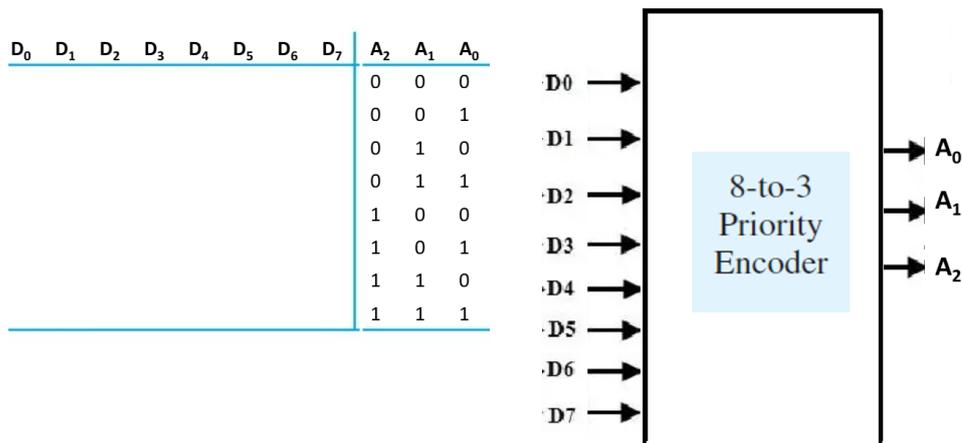
Tutorial 6: Decoder/Encoder

Answer the following questions:

Q. Find the input and the output of 2x4 Decoder



Q. Find the input of 8x3 Encoder





A decoder is a combinational circuit that converts binary information from n input lines to a maximum of _____ unique output lines.

1. 2

2. 2^n

3. 4

4. 4^n

Q.

A _____ is a multiple-input, multiple-output logic circuit which converts coded inputs into coded outputs, where the input and output code are different.

1. decoder

2. demultiplexer

3. multiplexer

4. encoder

Q.

An encoder has _____ input lines _____ output lines.

1. $2^n, n$

2. $n^2, 2$

3. $n, 2^n$

4. n, n^2

Q.



كلية تكنولوجيا الصناعة والطاقة

Information Technology Department
2nd Year



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How many 3×8 decoders are required to Construct a 4×16 decoder?

1. Two

2. Three

3. Four

4. Five

Q.

