

Computer Engineering Department Faculty of Engineering Cairo University

CMP3020 VLSI Design

Problem Set #2

Problem #1

Design MOS logic functions & Layout for the following gates with min. number of transistors:

a. Z= (AB+BC) . D

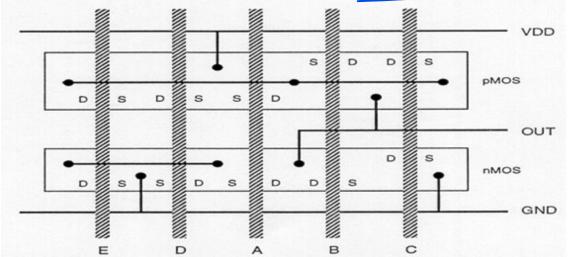
ъ. Z = (!A+B!+!C) . !D

✓. Z = ((A+B).C)+D

d. Z = !((A.B) + C.(A+B))

Problem #2

State the logical expression for the signal Out from the stick diagram:



$$!Z = A(E+D) + BC$$