

ENGR-354
HW # 9

1) do this problem:

Design a digital circuit which has a 4-bit input, $A = A_3A_2A_1A_0$ and a single output Z . Z is high if A is exactly divisible by 3 and A is not equal to 12. Note that 0 is not divisible by 3 in this circuit. Use a 2-to-4 decoder, a 4-to-1 MUX, and minimum logic gates, if necessary. Note that all inputs and outputs of the MUX and decoder are asserted HIGH.

2) show if or not the function given in class $f(a,b,c) = \Pi M(0, 1, 4, 6)$ is correctly implemented using the circuit shown in class which is repeated below:

