

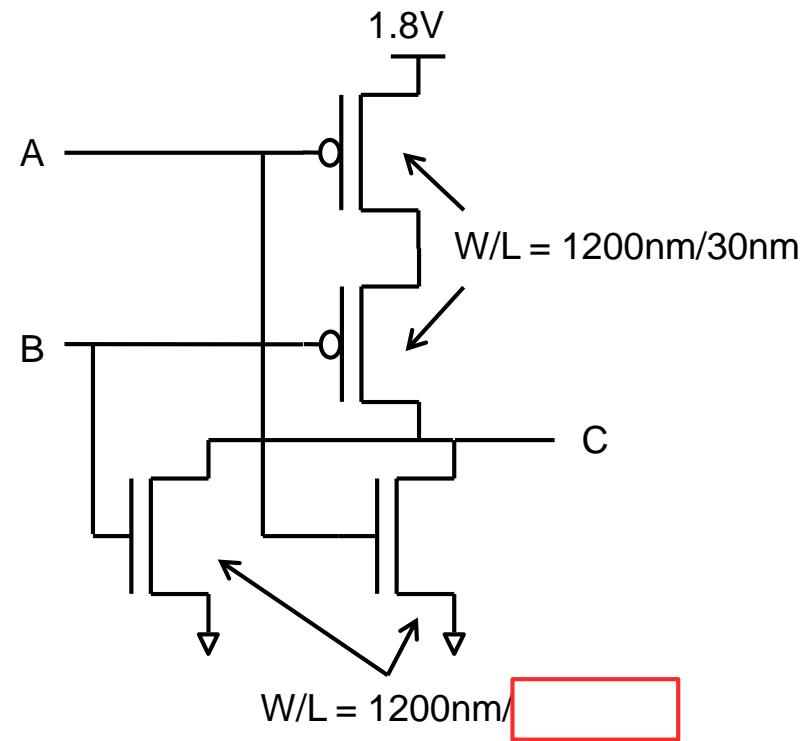
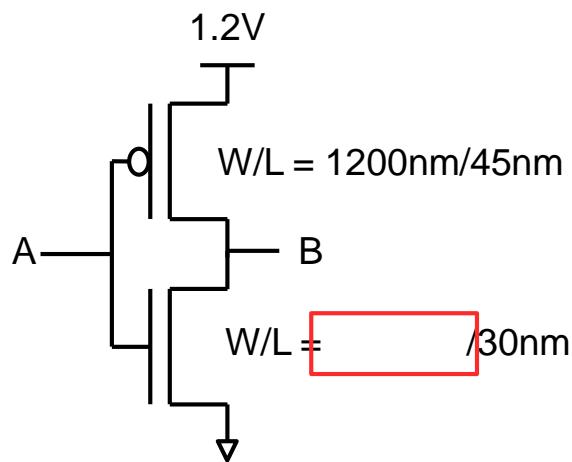
ELE 455/555  
Spring 2016

# Homework 2A

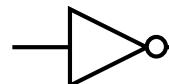
Due 2/2

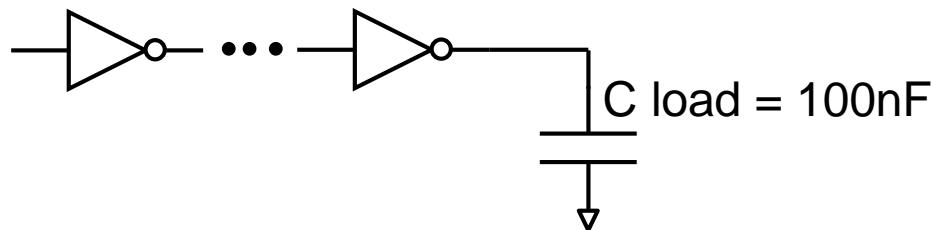
Beginning of class

1A. Provide the missing W or L to create a “balanced” gate. 10pts



2A. Given the following parameters, provide the optimal number of inverter stages and relative sizes. **10pts**

 Nominal Inverter: Normalized size =  $S = 1$ ,  $C_{in} = 25\text{pF}$ , Max fanout = 4  
 $S=1$



3A. Implement the following C statements in processor Z assembly language. **10pts**

```
unsigned int i, j;
```

```
for (i=1; i<=5; i++)
{
    j=i;
}
```