Problem: Considering the following sequence of operations. Assume (for simplicity) inputs and outputs don't need to be routed (can just appear where needed). For delays, assume operations cost unit delay and it costs unit delay to cross each position in the 1D placement.

$$A=i0+i1$$
$$B=i1+i2$$
$$C=i2+i3$$
$$G=A*B$$
$$H=B*C$$
$$O=G+H$$

A	B	C	G	H	O

For the above placement, what is the:

Wire Length	
Squared Wire Length	
Channel Width	
Critical Path Length	

Find a better placement, and summarize the same metrics:

Wire Length	
Squared Wire Length	
Channel Width	
Critical Path Length	