Homework Assignment No. 6

Due on Wednesday, February 23, 2005

1.) Problem 5.9 of the text.

[Answers: $W_p = 84\lambda$, W_n(3 stack) = 232λ, W_n(2 stack) = 155λ]

2.) Problem P5.10 of the text.

[Answers: $W_p = 63\lambda$, $W_n \approx 27\lambda$]

3.) Problem P5.11 of the text.

[Answers: (a.) 66μW, (b.) 4.4μW]

4.) Problem P5.12 of the text.

[Answers: P_{stat} (pseudo-NMOS) = 15.4μW, P_{stat} (CMOS)≈0, express P_{dyn} as a function of f_{avg})]

5.) Problem P5.16 of the text.

[Answers: $W \approx 1$μm]