EE220 Spring 2003 HW1

Largest functions in increasing order:

1. $F4, F2, F3, F6, F1, F5$
2. $F4, F6, F2, F3, F1, F5$
3. $F4, F6, F2, F3, F5, F1$
4. $F6, F4, F2, F3, F5, F1$
5. $F6, F2, F4, F3, F5, F1$
6. $F6, F2, F3, F4, F5, F1$
7. $F6, F2, F3, F4, F5, F1$

Cannot put functions in increasing order where $X > 32$, since $F4$ is eventually larger than $F5$ and $F1$, but not for all values of X between 33 and ∞. But, we can say for large X (as X approaches ∞), which functions will be the largest.

Functions in increasing order for large X: $F6, F2, F3, F5, F1, F4$

$\frac{F1(X)}{F5(X)}$ tends to infinity for large X. $\frac{F2(X)}{F4(X)}$ tends to 0 for large X.