

3. (4-points) Evaluate $\int (\ln 5x)^2 dx$. [Do not use any reduction formula].

4. (3-points) Evaluate $\int (\sec x)^{5/2} \tan^3 x dx$.

3. (4-points) Evaluate $\int (\ln 3x)^2 dx$. [Do not use any reduction formula].

4. (3-points) Evaluate $\int (\csc x)^{-1/2} \cot^3 x dx$.