Answer the following problems and simplify your answers.

ci f{v ezsgBf-Y--zCzPCHbYb..S'L S'zQLq-Ysi Show all work!

$$\text{f-g} \quad \int x^3 \ln x \, dx \qquad \text{f4g} \quad \int_0^{\frac{p}{2}} \frac{x^2}{}$$