7.3 #22

$$\int \tan x \sec^{\frac{5}{2}} x \, dx$$

Split off $\sec x \tan x$

$$\int \sec^{\frac{3}{2}} x \sec x \tan x \, dx \qquad u = \sec x \quad du = \sec x \tan x \, dx$$

$$\int u^{\frac{3}{2}} du = \frac{2}{5} u^{\frac{5}{2}} + C = \frac{2}{5} \sec^{\frac{5}{2}} x + C$$