Tips and Tricks for Application of Integral

Basically Application of integral is used to find area under curve.

So basically to find it use should first make rough sketch of curve on x-y plot.

Find the point where curve cuts x axis. Then to integrate first use should break the integration limit to the point where it cuts x- axis. And be sure that area under the curve is always positive.

So Those portion of curve are below x axis You should also take it positive not negative as integration will give negative value.