15. $\int \frac{x}{\sqrt{4+10x^2-x^4}}\,dx$

$= \int \frac{x}{\sqrt{-x^4+10x^2+4}}\,dx$

$= \int \frac{x}{\sqrt{-(x^4-10x^2-4)}}\,dx$

$= \int \frac{x}{\sqrt{-(x^4-10x^2+25-25-4)}}\,dx$

$= \int \frac{x}{\sqrt{-[(x^2-5)^2-29]}}\,dx$

$= \int \frac{x}{\sqrt{29-(x^2-5)^2}}\,dx$

$= \int \frac{x}{\sqrt{(\sqrt{29})^2-(x^2-5)^2}}\,dx$

$a=\sqrt{29} \quad u=x^2-5 \quad du=2x\,dx$

$= \frac{1}{2}\int \frac{2x}{\sqrt{(\sqrt{29})^2-(x^2-5)^2}}\,dx$

$= \frac{1}{2}\int \frac{1}{\sqrt{a^2-u^2}}\,du$

$= \frac{1}{2}\cdot \arcsin\frac{u}{a}+C$

$= \frac{1}{2}\arcsin\frac{x^2-5}{\sqrt{29}}+C$

$(-10\cdot\frac{1}{2})^2$

$(-5)^2$

25