

> restart;

> with(student);

[D, Diff, Doubleint, Int, Limit, Lineint, Product, Sum, Tripleint, changevar, completesquare, distance, equate, integrand, intercept, intparts, leftbox, leftsum, makeproc, middlebox, middlesum, midpoint, powsubs, rightbox, rightsum, showtangent, simpson, slope, summand, trapezoid]

> I1 := Int(sin(x^2), x = 0 .. 2);

$$I1 := \int_0^2 \sin(x^2) dx$$

> changevar(u = x^2, I1, u);

$$\int_0^4 \frac{\sin(u)}{2\sqrt{u}} du$$

> int(sin(x^2), x = 0 .. 2);

$$\frac{1}{2} \operatorname{FresnelS}\left(\frac{2\sqrt{2}}{\sqrt{\pi}}\right) \sqrt{2} \sqrt{\pi}$$

> ?erf

> ?FresnelS

> int(1/(9+x^2), x = 0 .. 3);

$$\frac{1}{12} \pi$$

>