

```
> restart;
```

```
> int(3*x+x-5,x=0..2);
```

-2

```
> int(1/(1+x),x=0..2);
```

ln(3)

```
> int(sin(3*x),x=0..Pi/12);
```

$-\frac{1}{6}\sqrt{2} + \frac{1}{3}$

```
> tmp:=Int(t*cos(t^2+1),t=-x..2*x);
```

```
diff(tmp,x);
```

$$tmp := \int_{-x}^{2x} t \cos(t^2 + 1) dt$$

$$-\cos(x^2 + 1)x + 4\cos(4x^2 + 1)x$$

```
> int(abs(x^2+x-2),x=-1..2);
```

$\frac{31}{6}$

```
> f:=piecewise(x>=1,3,x<1,-2);
```

```
> int(f,x=0..3);
```

$$f := \begin{cases} 3 & 1 \leq x \\ -2 & x < 1 \end{cases}$$

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