

```
>> syms x y z t u
>> f=@(x) x.^3
```

```
f =
```

```
@(x)x.^3
```

```
>> integral(f,0,2)
```

```
ans =
```

```
4.0000
```

```
>> g=t^3
```

```
g =
```

```
t^3
```

```
>> int(g,t,0,2)
```

```
ans =
```

```
4
```

```
>> int(log(x^2),x,1,Inf)
```

```
ans =
```

```
Inf
```

```
>> int(sin(x)/(4+x^2),x,-Inf,Inf)
```

```
ans =
```

```
0
```

```
>> int(sin(x)/(4+x^2),x,0,Inf)
```

```
Warning: Explicit integral could not be found.
```

```
ans =
```

```
int(sin(x)/(x^2 + 4), x == 0..Inf)
```

```
>>
```

```
>> f=@(x) sin(x)./(x.^2+4)
```

```
f =
```

@(x)sin(x)/(x.^2+4)

>> integral(f,0,Inf)

Warning: Reached the limit on the maximum number of intervals in use.
Approximate bound on error is 1.9e-06. The integral may not exist, or it
may be difficult to approximate numerically to the requested accuracy.

> In funfun\private\integralCalc>iterateScalarValued at 372

In funfun\private\integralCalc>vadapt at 133

In funfun\private\integralCalc at 84

In integral at 89

ans =

0.2580

>>

>> int(sin(t)/(t^2+4),t,0,y)

Warning: Explicit integral could not be found.

ans =

int(sin(t)/(t^2 + 4), t == 0..y)

>> limit(ans,y,0)

ans =

limit(int(sin(t)/(t^2 + 4), t == 0..y), y == 0)

>> limit(int(sin(t)/(t^2+4),t,0,y),y,Inf)

Warning: Explicit integral could not be found.

ans =

limit(int(sin(t)/(t^2 + 4), t == 0..y), y == Inf)