

restart :

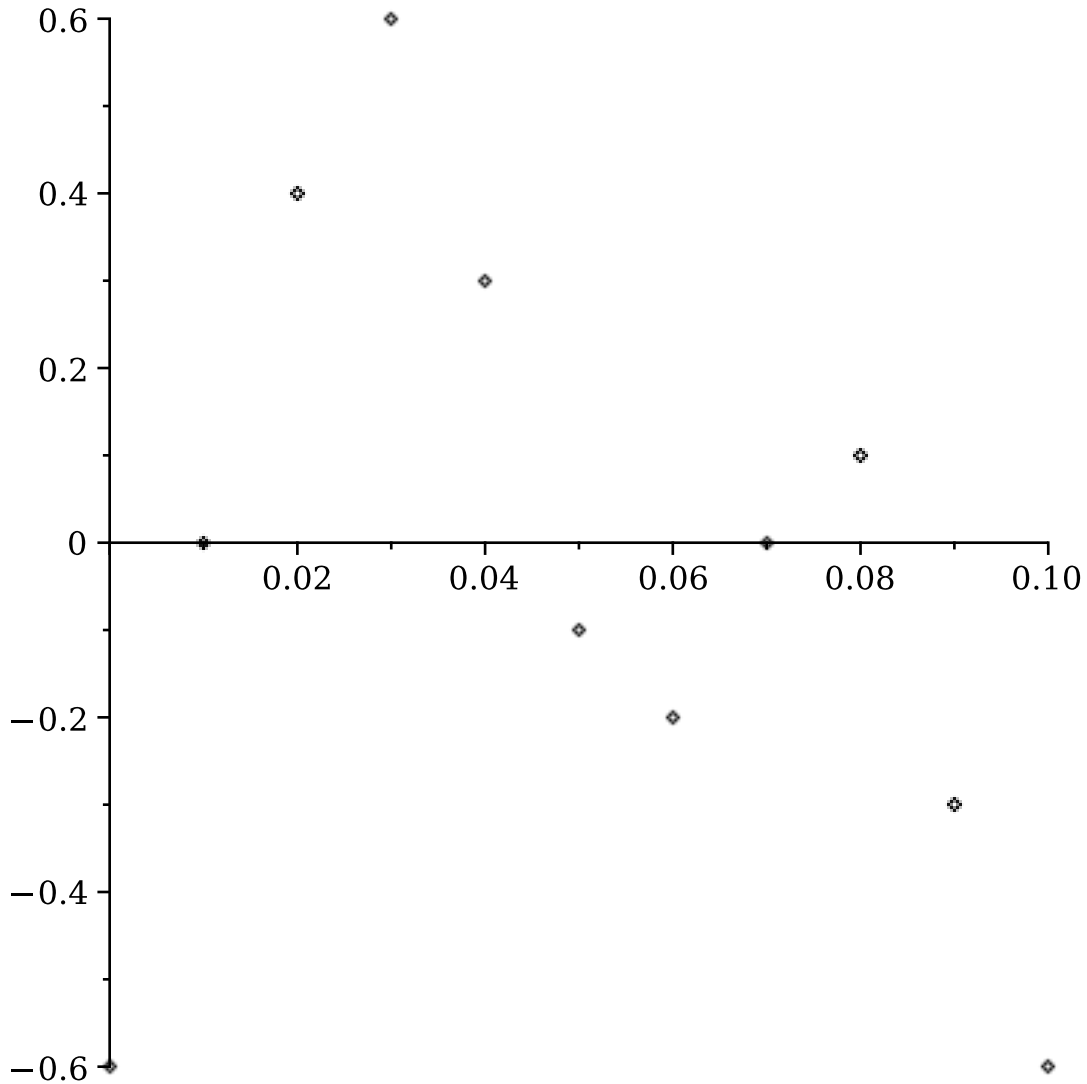
Warning, not a built-in function (`rtable alias`)

$Times := [0., 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.10]:$

Warning, not a built-in function (`rtable alias`)

$Amplitudes := [-0.6, 0., 0.4, 0.6, 0.3, -0.1, -0.2, 0., 0.1, -0.3, -0.6]:$

$pointplot(Times, Amplitudes)$



$f := \text{LinearInterpolation}(Times, Amplitudes)$

$f := \left[\begin{array}{l} \text{a linear interpolation object} \\ \text{with 11 points in 1-D} \end{array} \right]$

(1)

$f(0.033)$ Error, (in CurveFitting:-ArrayInterpolation) rtable expected

$plot(f(x), x = 0 .. 0.1, gridlines)$

Error, (in plot) unexpected option

```
NewTimes := [seq(0.001*i, i = 0 .. 100)]:
```

```
NewAmplitudes := f(NewTimes):
```

```
Error, (in CurveFitting:-ArrayInterpolation) rtable expected
```

```
pointplot(NewTimes, NewAmplitudes)
```

```
Error, (in plots:-pointplot) number of elements in list must be a multiple of 2
```

```
NewAmplitudes := f(NewTimes, 'method' = 'spline'):
```

```
Error, (in CurveFitting:-ArrayInterpolation) rtable expected
```

```
pointplot(NewTimes, NewAmplitudes)
```

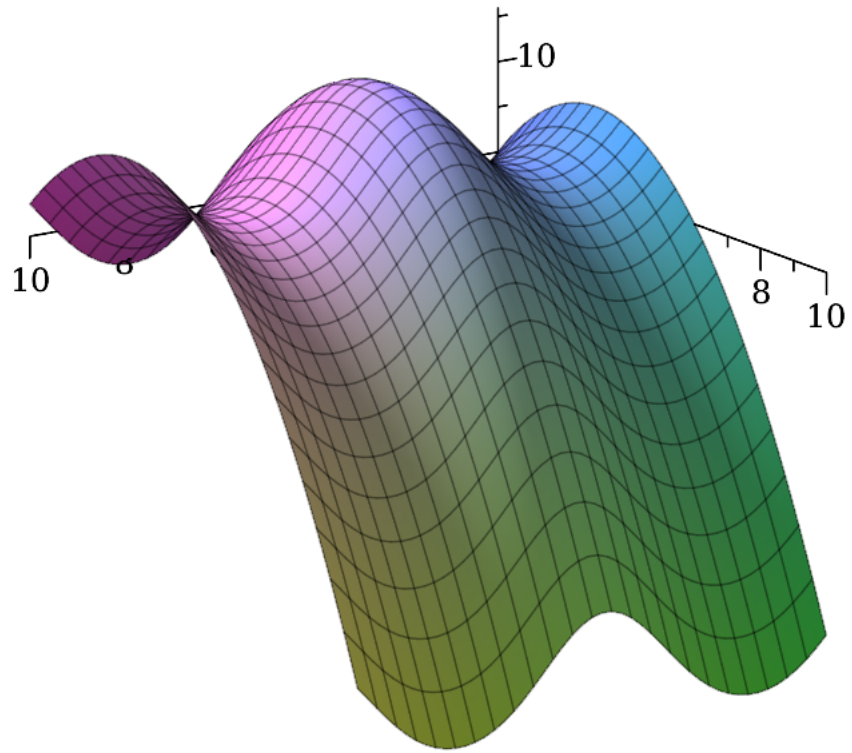
```
Error, (in plots:-pointplot) number of elements in list must be a multiple of 2
```

```
plot(f(x, 'method' = 'spline'), x = 0 .. 0.1, gridlines)
```

```
Error, (in plot) unexpected option
```

```
f := (i, j) → (3 - sin(i))2 - (3 - j)2:
```

```
plot3d(f, 0 .. 10, 0 .. 10, axes = normal)
```

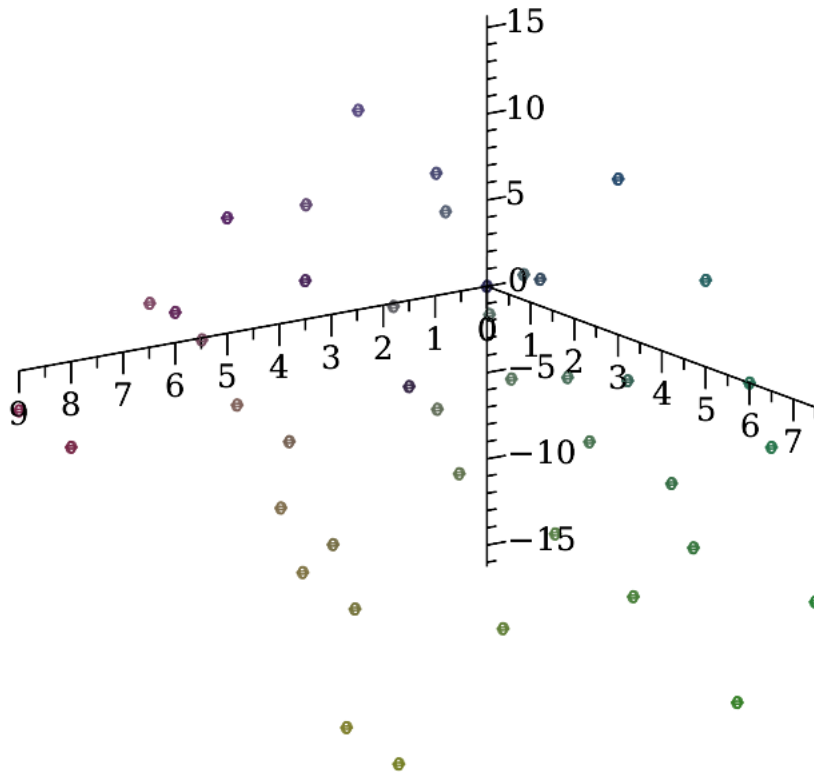


```
v := Array([0, 1.5, 3.5, 5, 6, 8, 9]) :
```

```
w := Array([0, 3, 5, 6, 6.5, 7.5]) :
```

```
y := Matrix(7, 6, (a, b) → evalf(f(v[a], w[b]))) :
```

```
pointplot3d([seq(seq([v[i], w[j], y[i,j]], j = 1 .. 6), i = 1 .. 7)], axes = normal, symbol = sphere)
```



```
a1 := Matrix(50, 50, (i,j) → 1/5*i) :
a2 := Matrix(50, 50, (i,j) → 1/5*j) :
```

```
A := ArrayTools[Concatenate](3, a1, a2) :
```

Error. (in ArrayTools:-Copy) argument #2, must be the source rtable

```
f := LinearInterpolation([v, w], y)
```

Error. (in Interpolation:-LinearInterpolation) invalid subscript selector

```
B := f(A)
```

Error, invalid input: f uses a 2nd argument, j, which is missing

```
matrixplot(Matrix(B), axes = normal)
```

Error. (in Matrix) dimension parameters are required for this form of initializer

```
B := f(A, method = spline) :
```

```
matrixplot(Matrix(B), axes = normal)
```

Error. (in Matrix) Array option must be a name or string

B := f(A, method = spline, degree = 5) :
matrixplot(Matrix(B), axes = normal)

Error. (in Matrix) Array option must be a name or string