

---

## Table of Contents

.....	1
Single application of Simpson's 1/3 .....	1
Applying function. ....	1
Summation Funtion .....	1
Plotting Function .....	2
Piecewise function .....	5

`%Workshop #4 - Cory Wolfe`

## Single application of Simpson's 1/3

```
x = 0:3:6;  
y = x.^2;  
I = (x(3)-x(1))/6*(y(1)+4*y(2)+y(3));
```

## Applying function.

```
I_f = singleS13(x,y)  
  
x1 = 0:3:6;  
y1 = x1.^4;  
I_f1 = singleS13(x1,y1)
```

```
I_f =  
  
72
```

```
I_f1 =  
  
1620
```

## Summation Funtion

```
sumi2(3)  
help sumi2  
sumi2(3,2)
```

```
ans =  
  
14
```

---

*Computes the summation of  $i^2$  from 1 to  $imax$*

*Inputs:*

*$imax$  = maximum*

*$istep$  = increment size (Default 1)*

*Outputs:*

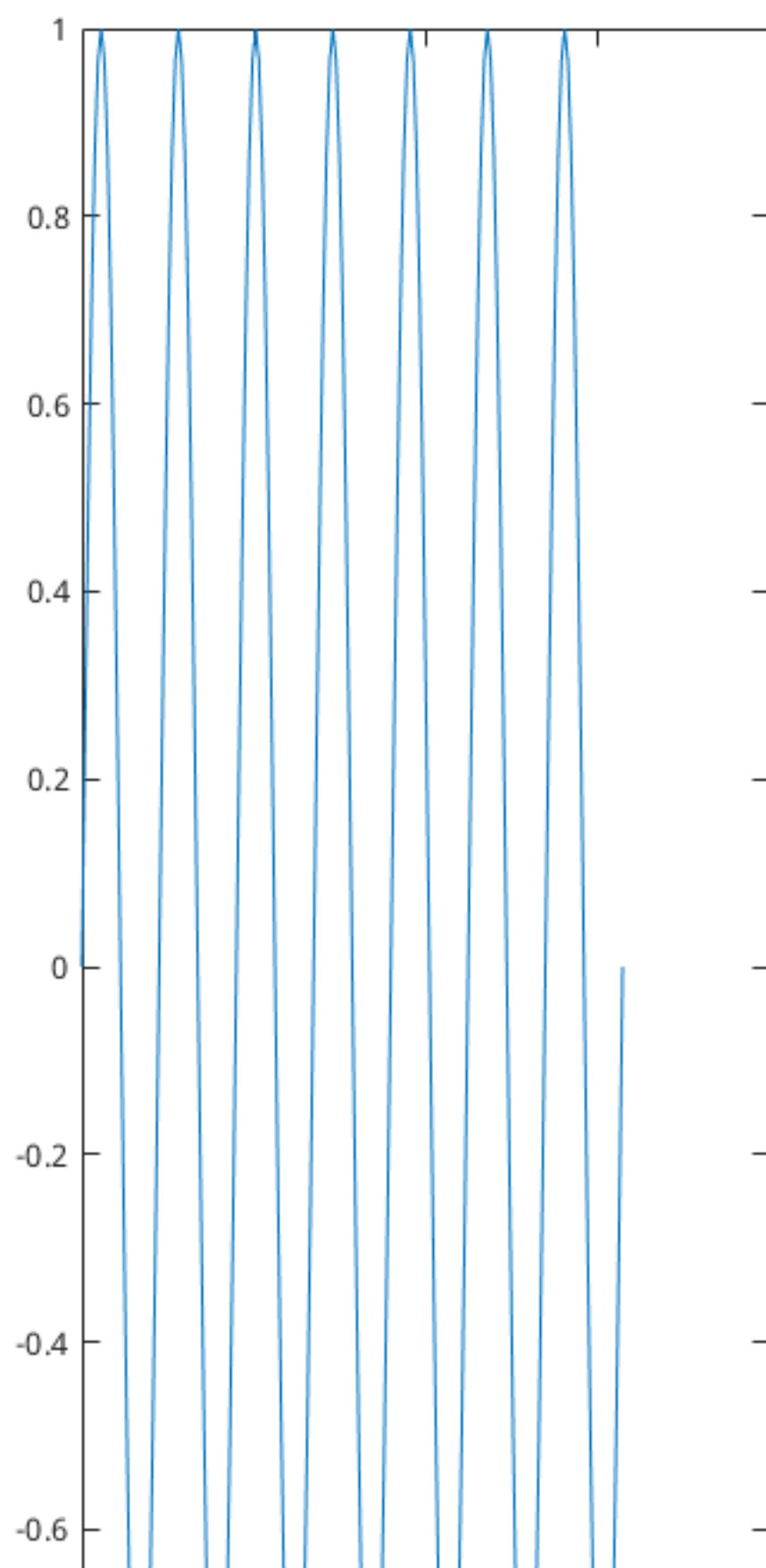
*$s$  = summation*

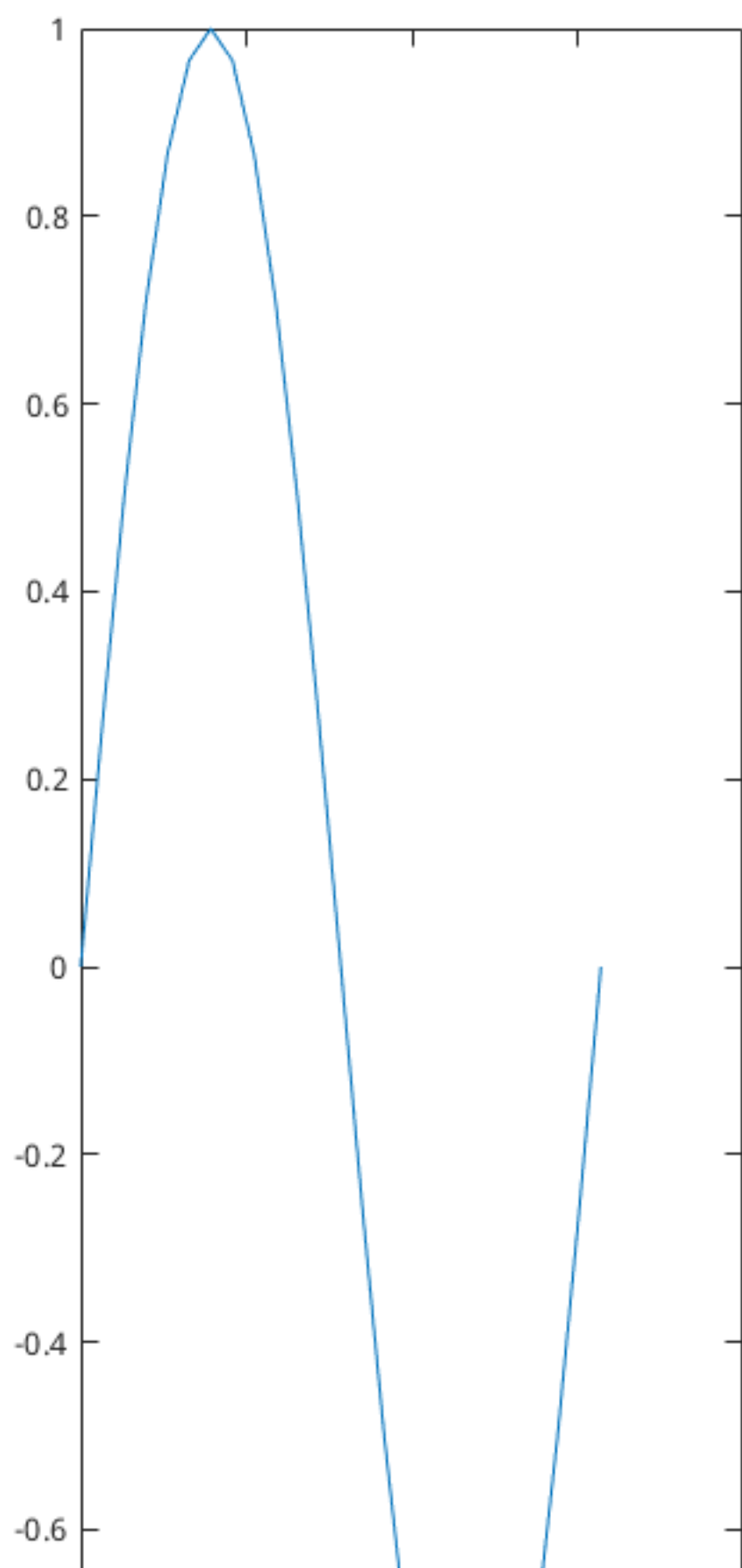
*ans =*

*10*

## Plotting Function

```
figure(1)
plotsinmx(7)
figure(2)
plotsinmx()
```





---

# Piecewise function

```
piecewise4(-5)
piecewise4(-.25)
piecewise4(1/3)
piecewise4(10)
```

```
ans =
```

```
0
```

```
ans =
```

```
0.7500
```

```
ans =
```

```
0.6667
```

```
ans =
```

```
0
```

*Published with MATLAB® R2016a*