Esempi OCTAVE/MATLAB

[Figure 1: sin(x) 1](#_Toc433745200)

[Figure 2: sin(x) + cos(y) 3](#_Toc433745201)

[Figure 3: distribuzione Gaussiana 4](#_Toc433745202)

octave:1> a=0.5; b=0.5; c=a+b

c = 1

octave:2> sin(c)

ans = 0.84147

octave:3> cos(c)

ans = 0.54030

octave:4> log(c)

octave:5> exp(c)

ans = 2.7183

octave:6> c\*\*2

ans = 1

octave:7> 2\*\*2

ans = 4

octave:11> x=(0.1:0.1:7.3); x'
octave:13> sin(x)'

|  |
| --- |
| file:///T:/octave-online-line-16-1.pngFigure 1: sin(x) |

|  |  |
| --- | --- |
| x | sin(x) |
| 0.10000 | 0.099833 |
| 0.20000 | 0.198669 |
| 0.30000 | 0.295520 |
| 0.40000 | 0.389418 |
| 0.50000 | 0.479426 |
| 0.60000 | 0.564642 |
| 0.70000 | 0.644218 |
| 0.80000 | 0.717356 |
| 0.90000 | 0.783327 |
| 1.00000 | 0.841471 |
| 1.10000 | 0.891207 |
| 1.20000 | 0.932039 |
| 1.30000 | 0.963558 |
| 1.40000 | 0.985450 |
| 1.50000 | 0.997495 |
| 1.60000 | 0.999574 |
| 1.70000 | 0.991665 |
| 1.80000 | 0.973848 |
| 1.90000 | 0.946300 |
| 2.00000 | 0.909297 |
| 2.10000 | 0.863209 |
| 2.20000 | 0.808496 |
| 2.30000 | 0.745705 |
| 2.40000 | 0.675463 |
| 2.50000 | 0.598472 |
| 2.60000 | 0.515501 |
| 2.70000 | 0.427380 |
| 2.80000 | 0.334988 |
| 2.90000 | 0.239249 |
| 3.00000 | 0.141120 |
| 3.10000 | 0.041581 |
| 3.20000 | -0.058374 |
| 3.30000 | -0.157746 |
| 3.40000 | -0.255541 |
| 3.50000 | -0.350783 |
| 3.60000 | -0.442520 |
| 3.70000 | -0.529836 |
| 3.80000 | -0.611858 |
| 3.90000 | -0.687766 |
| 4.00000 | -0.756802 |
| 4.10000 | -0.818277 |
| 4.20000 | -0.871576 |
| 4.30000 | -0.916166 |
| 4.40000 | -0.951602 |
| 4.50000 | -0.977530 |
| 4.60000 | -0.993691 |
| 4.70000 | -0.999923 |
| 4.80000 | -0.996165 |
| 4.90000 | -0.982453 |
| 5.00000 | -0.958924 |
| 5.10000 | -0.925815 |
| 5.20000 | -0.883455 |
| 5.30000 | -0.832267 |
| 5.40000 | -0.772764 |
| 5.50000 | -0.705540 |
| 5.60000 | -0.631267 |
| 5.70000 | -0.550686 |
| 5.80000 | -0.464602 |
| 5.90000 | -0.373877 |
| 6.00000 | -0.279415 |
| 6.10000 | -0.182163 |
| 6.20000 | -0.083089 |
| 6.30000 | 0.016814 |
| 6.40000 | 0.116549 |
| 6.50000 | 0.215120 |
| 6.60000 | 0.311541 |
| 6.70000 | 0.404850 |
| 6.80000 | 0.494113 |
| 6.90000 | 0.578440 |
| 7.00000 | 0.656987 |
| 7.10000 | 0.728969 |
| 7.20000 | 0.793668 |
| 7.30000 | 0.850437 |

octave:21> ang=(0.1:0.1:7.3);

[x, y] = meshgrid (ang, ang);

mesh(x,y,sin(x)+cos(y))



Figure 2: sin(x) + cos(y)

Confronto tra distribuzione numeri random e distribuzione Gaussiana:



Figure 3: distribuzione Gaussiana