

s1.m

```
%data
x=4;
t=5;
%answer
v=(x*t-x/t)^(1/(x-t))
```

s2.m

```
z1=@(x,y)cos(x*y)-x+y^3;
z2=@(x,y)z1(x-y,x+y)-x*tan(x);
u1=z1(1,5)
u2=z2(1,5)
```

s3.m

```
y=[-11.3 12.7]';
A=[5 7
   -3 6];
x=A\y
```

s4.m

```
F=@(x,y,z)[x-y x+z y*z];
v=F(1,2,-3)
```

s5.m

```
z_1=g(10)
z_2=g(-10)
```

g.m

```
function z=g(x)
if x < 1
    z=1-x^2;
else
    z=1+x;
end
```

s6.m

```
for i=1:20
    x(i)=sqrt(i);
end
x
```

s7.m

```

for k=1:2:11
    q(k)=k^2;
end
for k=2:2:10
    q(k)=k^2+1;
end
q

```

s8.m

```

x=0;
xold=-1;
while abs(x-xold)>=1e-7
    xnew=cos(x);
    xold=x;
    x=xnew;
end
x

```

s9.m

```

x=0:1e-3:5;
z=sin(x)-4;
z1=x.^2.*cos(x);
plot(x,z)
grid on
xlabel('x')
ylabel('z')
figure
plot(x,z1)
grid on
xlabel('x')
ylabel('z')

```

s10.m

```

[x,y]=meshgrid(1:1e-1:3,0:1e-1:2);
z=x.^2+3*y.^2;
surf(x,y,z)
%shading('interp')

```