```
format long

f =@(t) t - pi./((2+(4*pi./0.001).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v0 = c
```

```
v0 =
   0.150500000000000
```

```
f =@(t) t - pi./((2+(4*pi./0.1).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v1 = c
```

```
v1 =
   0.025601681508930
```

```
f =@(t) t - pi./((2+(4*pi./0.2).*exp(-pi./2*t)));
```

```
a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v2 = c
```

```
v2 =
   0.052482512804061
```

```
f =@(t) t - pi./((2+(4*pi./0.3).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v3 = c
```

```
v3 =
   0.080767108964478
```

```
f =@(t) t - pi./((2+(4*pi./0.4).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
```

```
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v4 = c
```

```
v4 =
   0.110596120847803
```

```
f =@(t) t - pi./((2+(4*pi./0.5).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v5 = c
```

```
v5 =
   0.142127980975895
```

```
f =@(t) t - pi./((2+(4*pi./0.6).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
```

```
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v6 = c
```

```
v6 =
   0.175540285805734
```

```
f =@(t) t - pi./((2+(4*pi./0.7).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v7 = c
```

```
v7 =
   0.211030251189929
```

```
f =@(t) t - pi./((2+(4*pi./0.8).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
```

```
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v8 = c
```

```
v8 =
   0.248813226745528
```

```
f =@(t) t - pi./((2+(4*pi./0.9).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end

if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v9 = c
```

```
v9 =
   0.289117509759272
```

```
f =@(t) t - pi./((2+(4*pi./1.0).*exp(-pi./2*t)));

a= 0.001;
b= 0.3;
sc= 0.0001;

for i=2:100;
c=(a+b)/2;
if f(a)*f(c)<0
    b=c;
else
    a=c;
end
```

```
if f(b)*f(c)<0;
    a=c;
else
    b=c;
end
end
v10 = c
```

```
v10 =
   0.150500000000000
```

```
delta = [0.001 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0]
```

```
delta = 1×11
   0.001000000000000   0.100000000000000   0.200000000000000   0.300000000000000 ···
```

```
v = [v0 v1 v2 v3 v4 v5 v6 v7 v8 v9 v10]
```

```
v = 1×11
   0.150500000000000   0.025601681508930   0.052482512804061   0.080767108964478 ···
```

```
figure()
plot(delta,v,'b')
xlabel('\Delta')
ylabel('T (\Delta)')
title('Equation of T as a function of \Delta for a range of 0 < \Delta < 1')
```