

# Page 445-6 Example 11

## Solution to a problem using a GDC

TI-84 Plus

```
tan⁻¹(2X)-(e^X-3)=0
▪ X=1.4439613452...
bound=(-1E99,1E99)
▪ left-rt=0
```

```
X→A
1.443961345
tan⁻¹(2A)→B
1.23744861
d/dx(tan⁻¹(2X))|X=A→M
.2141306064
```

```
M(X-A)+B=0
M=.2141306064
▪ X=-4.334981847...
A=1.4439613452...
B=1.2374486102...
bound=(-1E99,1E99)
▪ left-rt=0
```

```
X→U
-4.334981848
-1
d/dx(e^X-3)|X=A→N
-.2359910232
```

Casio fx-9860GII

```
Eq:tan⁻¹(2X)-(e^X-3)
X=1.443961345
Lft=0
Rgt=0
```

|REPT

```
X→A
1.443961345
tan⁻¹(2A)→B
1.23744861
□
```

DEL L DEL A

```
d/dx(tan⁻¹ 2X)|X=A→M
0.2141305278
□
```

MAT |logab| Abs |d/dx| |d/dx| |d/dx| |d/dx|

```
Eq:M(X-A)+B
X=-4.33498397
Lft=0
Rgt=0
```

|REPT

▶ Continued on next page

```

N(X-A)+B=0
N= -.2359910232...
▪ X=6.6875871132...
A=1.4439613452...
B=1.2374486102...
bound=(-1E99,1...
▪ left-rt=0

```

```

X→U
      6.687587113
( |U|+V)B
-----
      2
      6.819931321

```

```

X→U
      -4.33498397
      -1
      -----→N
      d
      dx (eX-3)|x=A
      -0.2359910232
      [MAT] [logab] [Abs] [d/dx] [d/dt] [d/dx] [d/dt] [d/dx] [d/dt]

```

```

Eq: N(X-A)+B
X=6.687586239
Lft=0
Rgt=0

```

REPT

```

X→U
      6.687586239
( |U|+V)B
-----
      2
      6.819932094
      [MAT] [logab] [Abs] [d/dx] [d/dt] [d/dx] [d/dt] [d/dx] [d/dt]

```