Calculator Appendix F

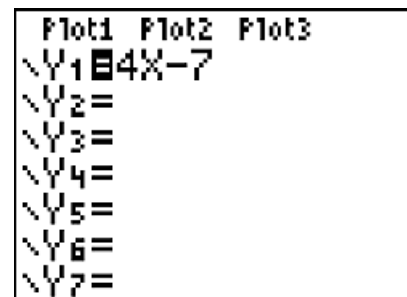## Evaluating a function at a particular *x* position

We will consider the linear function f(x) = 4x – 7 being evaluated at x = 3. The answer is:
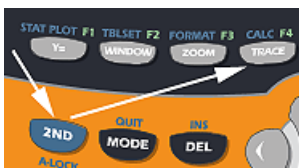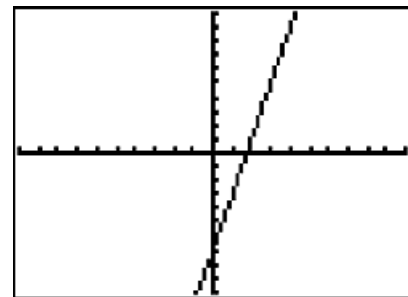
f(3) = 4(3) – 7 = 5

To obtain this answer on a graphing calculator, press the **Y=** button and enter **Y1** as 4x – 7.

```
Plot1 Plot2 Plot3
\Y1⊟4X-7
\Y2=
\Y3=
\Y4=
\Y5=
\Y6=
\Y7=
```
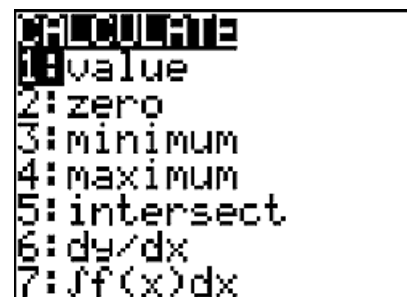
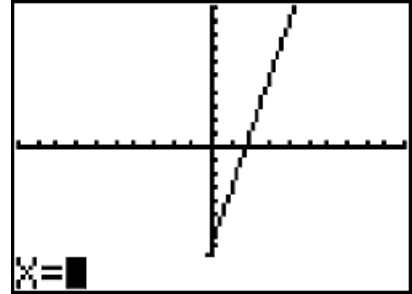Now press the **GRAP**H button.

The graph of this function displays.

To evaluate this function at a particular value of *x*, press **2nd Calc** and this menu results. Choose **1. Value**

```
CALCULATE
1:value
2:zero
3:minimum
4:maximum
5:intersect
6:dy/dx
7:∫f(x)dx
```

At the bottom of the display an **x =** appears inviting us to enter the *x* value at which we want the function evaluated. Enter **3** and then press **ENTER**.

Finally, we get this display and at the bottom where we see the answer, **Y = 5**. Also notice that an x marks the place on the graph of the function at which the function is being evaluated.