

How to Do Page 71 Example 4d) Using TI 83/84

Use a graphing calculator to graph the function $s = 331.3\sqrt{1 + \frac{T}{273.15}}$.

- Enter the function in the Y = screen.
 - Press $\boxed{Y=}$. If you wish to clear an entry line, move the cursor to the line and press $\boxed{\text{CLEAR}}$ $\boxed{\text{ENTER}}$.
 - On a "Y=" line, enter $331 \boxed{2\text{nd}} \boxed{x^2} \boxed{1} \boxed{+} \boxed{x.T.\theta.n} \boxed{\div} \boxed{273} \boxed{)}$. See Figure 1.

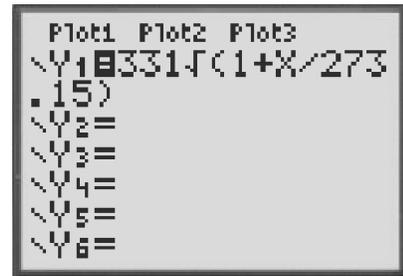


Figure 1

- Enter a window and then graph the function.
 - Press $\boxed{\text{WINDOW}}$. A possible window is shown in Figure 2.

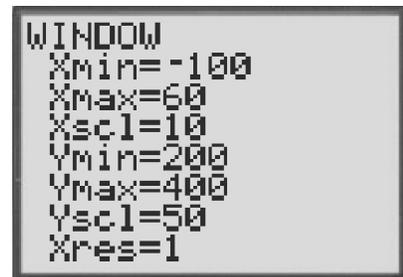


Figure 2

- Press $\boxed{\text{GRAPH}}$. You will see Figure 3.

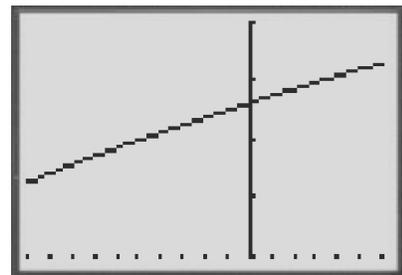


Figure 3



3. Label the horizontal axis.

- Press **2nd** **MODE** and then **2nd** **PRGM**.
- Scroll down and select Text as shown in Figure 4.

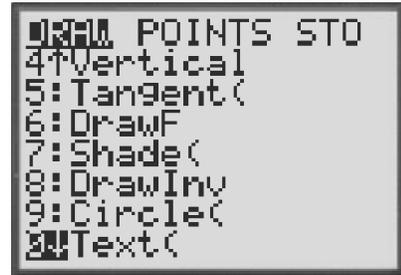


Figure 4

- Enter **52** **,** **61** **,** **2nd** **ALPHA** **+** **TEMP** **ALPHA** **-** **ALPHA** **0** **(** **2nd** **APPS** **1** **ALPHA** **C** **)** **ALPHA** **+** **)** as shown in Figure 5 below. Press **ENTER**. You will see Figure 6.

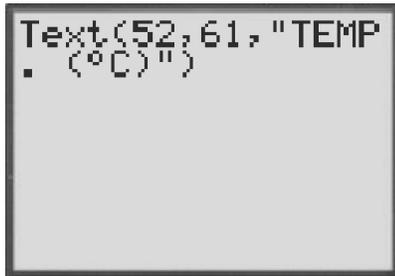


Figure 5

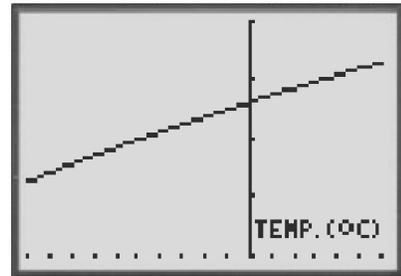


Figure 6

4. Label the vertical axis.

- Press **2nd** **MODE** and then **2nd** **PRGM**. Scroll down and select Text.
- Type **0** **,** **20** **,** **2nd** **ALPHA** **+** **SPEED 0 OF 0** **+** **ALPHA** **)** as shown in Figure 7.
- Press **ENTER**. See Figure 8.



Figure 7

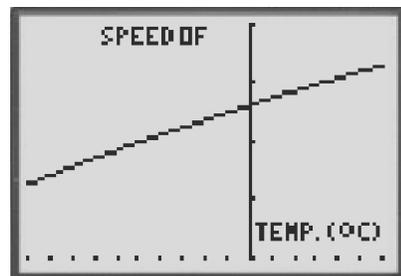


Figure 8



Name: _____

Date: _____

TM 2-2
(continued)

- Repeat step 4 and type the following, as shown in Figure 9:

8 [] 20 [] 2nd [ALPHA] + SOUND 0 [ALPHA] ([ALPHA] M ÷ [ALPHA] S) [ALPHA] + []

- Press [ENTER]. See Figure 10.



```
Text(8,20,"SOUND  
(M/S)")
```

Figure 9

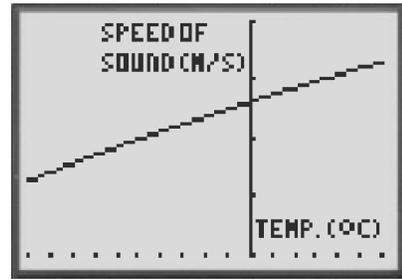


Figure 10

