

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

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

1. 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.

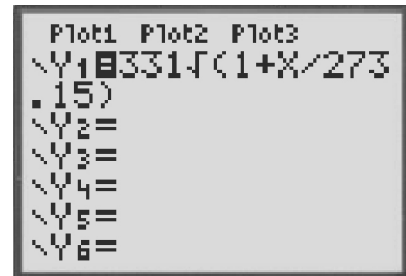


Figure 1

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

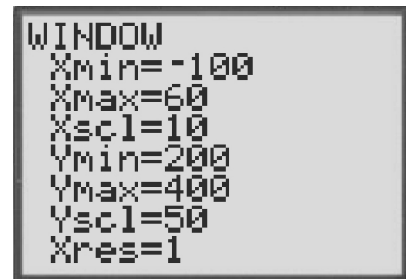


Figure 2

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

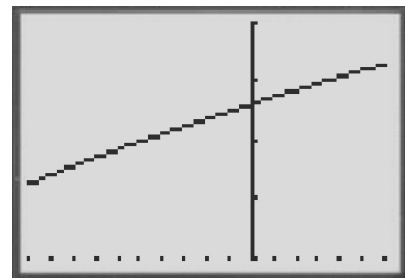


Figure 3



## 3. Label the horizontal axis.

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

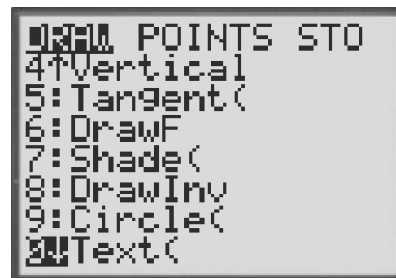


Figure 4

- 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.

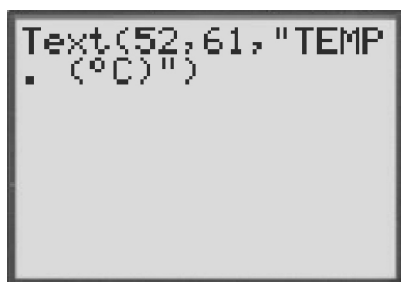


Figure 5

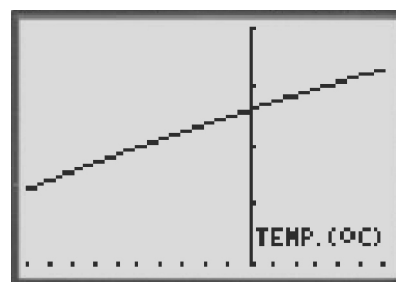


Figure 6

## 4. Label the vertical axis.

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

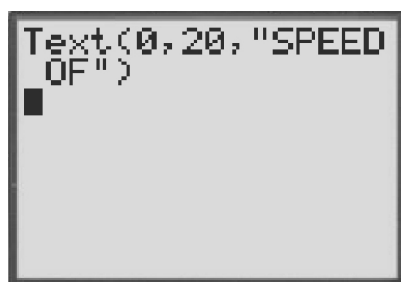


Figure 7

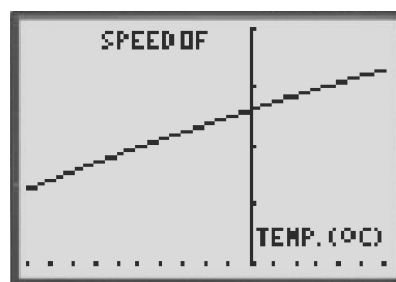


Figure 8



Name: \_\_\_\_\_

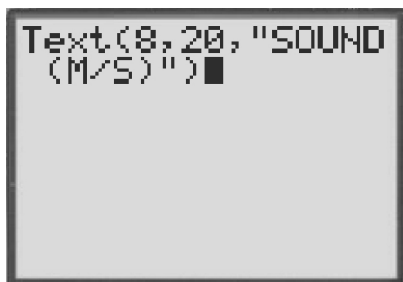
Date: \_\_\_\_\_

**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

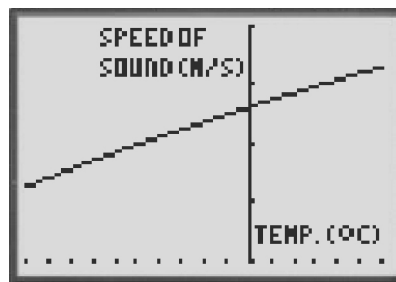


Figure 10

