

# Technology Activity

(Use with Lesson 12-2)

## Performing Unit Conversions

In Lesson 12-2, you saw how to perform unit conversions using the process for multiplying rational expressions. You can also use a TI-83 program to perform a variety of unit conversions quickly. You will need a TI-Graph Link™ Cable and the accompanying PC or Macintosh software for the TI-83. (The Product Information for Graphing Calculators area of the Texas Instruments website gives help and resources, including downloadable Graph Link computer software and manuals, for using the TI-Graph Link™ Cable and software.)

- Visit the Texas Instruments calculator website at <http://www.ti.com/calc>. Go to the Calculator Program Archive and view the program listings for the TI-83. Download the calculator program titled unitconv. (The website gives information on how to download this file.)
- Using the TI-Graph Link™ Cable and software, send the program to your TI-83.
- Verify that the unitconv program was received successfully by your calculator by pressing **PRGM**. Scan the list of programs for UNITCONV. It should be listed in alphabetical order with any other programs saved in your calculator.

### Example

**Convert 88 centimeters to yards. Round to the nearest thousandth.**

Press **PRGM** and select UNITCONV. Press **ENTER** to run the program. Enter 1 for length conversions. Enter 2 for converting from centimeters. Enter 6 for converting to yards. Then enter 88 and press **ENTER**. The screen display shows that 88 centimeters is equivalent to approximately 0.962 yards.

```

CONVERTING...
88  CENTIMETERS
TO YARDS
:RESULT IS
.9623797025
  
```

Press **ENTER** to continue. You may select another conversion from the menu or exit the program by entering 7, then 6.

*Use the program to perform each conversion. Round the result to the nearest thousandth.*

- 1 light year to kilometers
- 4500 yards to nautical miles
- 4 acres to square meters
- 16,000 quarts to cubic feet
- 17.25 years to hours
- 1250 pounds to metric tons
- 10 ft/s to km/hr
- 24 m/s to mph