# 2-Dimensional Figures

This activity takes you step-by-step through the process of using Logo Light to investigate 2D shapes in the Explorer Draw App on the TI-73 Explorer™. Investigate how to draw a square and more!



Download the Explorer Draw App from <a href="https://www.education.ti.com/apps">www.education.ti.com/apps</a> and follow the directions to install this application onto your calculator.

## **Engage**

- 1. Turn on your TI-73 Explorer and press APPS
- 2. Scroll down to find EXPDRAW and press ENTER
- 3. Press any key to continue through the opening screens
- 4. On the Explorer Draw screen, press 1 to choose 1: Logo Light
- 5. Press ENTER for a NEW LOGO FILE

## **Explore**

- 1. Press < CMDS> (GRAPH) to see the Logo Commands
- 2. Select the command FD (forward) and press ENTER
- 3. Type in 10. You should see FD 10 on the command line
- 4. Press ENTER. Turtle should move forward 10 units
- 5. Press <CMDS> and select RT (turn right). Press ENTER
- 6. Type 90. The command line should now read RT 90
- 7. Press ENTER. Turtle should turn right 90 degrees
- 8. Repeat steps 1 7 three times to draw a square
- Press < ' > (\(\overline{\text{Z00M}}\)) to see all of the commands to draw a square.
   Use the up and down arrow keys to see all of the commands
- 10. Press <FILE> (GRAPH) to SAVE FILE, SAVE PIC, or EXIT if needed
- **11.** Press  $< \cdot > (200M)$  to see your square again

Continued on back



LOGO LIGHT

SELECT A FILE TO PLAY!

(19:14-10-01-7-14-3)

OPEN LOGO2

OPEN LOGO3

SELECT & PRESS CENTER)

(HELP)





# **2-Dimensional Figures**

### **Extend**

- 1. What is the perimeter of the square?
- 2. Why did turtle need to turn 90 degrees to draw the square?
- Try to tessellate the screen using squares! Investigate the Repeat command. Repeat 4 (FD 10 RT 90)
- **4.** Start a NEW LOGO FILE. Write the commands to draw a regular hexagon
- **5.** Write a description of how you decided to turn turtle to draw the regular hexagon
- 6. What is the perimeter of your regular hexagon?

