

## CPTR-241 HW problem # 11

The goal is to explore dynamic dispatch and further observe overriding and inheritance. On the class webpage is the textbook's TwoDShape class with main program DynShapes from pages 255-258 of the text (filename is dyanamic\_dispatch.java). We will use this program as a starting point.

Extend the TwoDShape program to include these shapes:

- 1) a trapazoid. Assume that width is the trapazoid base. top will be a third dimension with  
area =-  $1/2 \text{ height} * (\text{base} + \text{top})$
- 2) a parabola. Area =  $2/3 \text{ height} * \text{width}$
- 3) a parallelogram. Include as a parameter the inside angle (will range 0 to 90 degrees; ok, zero isn't useful, so 0+)

Copy your .java file to D2L for HW#11