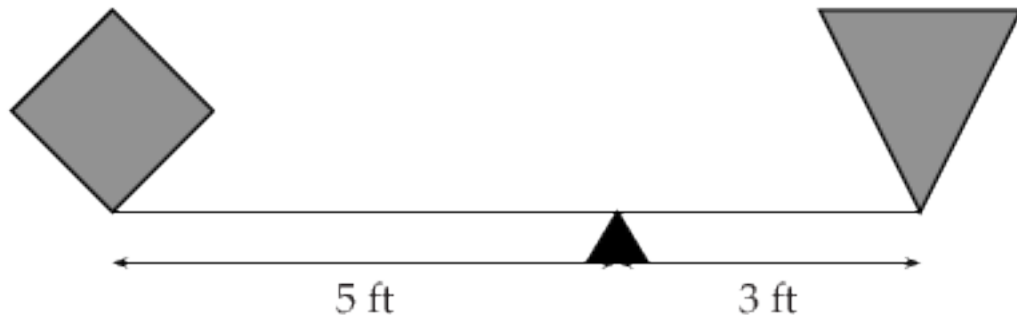


LAS Calculus

Archimedes

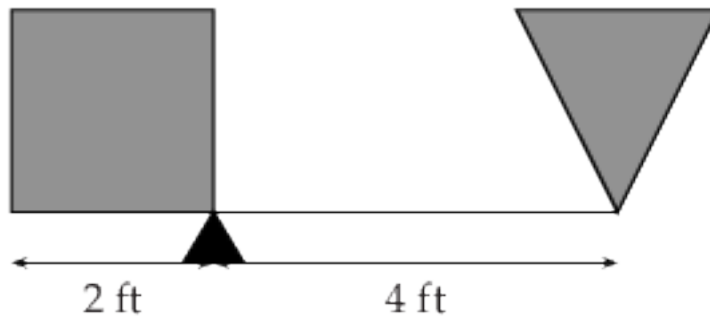
Homework 2

1. Archimedes supposedly said "Give me a lever long enough and a place to stand, and I shall move the earth." What did he mean by that?
2. Do problems 1.47 and 1.48 on page 57.
3. A triangle balances with a square, as shown.



If the area of the square is 2 square feet, what is the area of the triangle?

4. A triangle balances with a square, as shown.



What is the area of the triangle?

(Hint: Where on the lever is the square's center of gravity?)

5. Archimedes found the area of a parabolic segment in *The Method*. What did he do in *Quadrature of the Parabola*, and why did he feel it necessary?