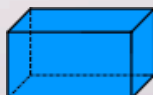


Math 1030 #18d

Problem Solving in Geometry

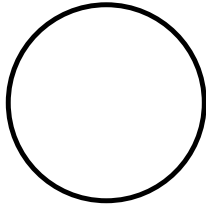


Optimization

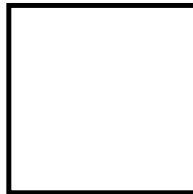


Optimization problems seek "best solutions" to various problems.

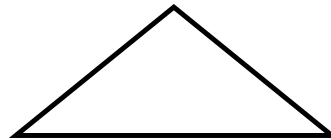
Ex 1) If each of these shapes has a perimeter of 16 ft, put them in order of area from least to greatest.



circle



square



Isosceles triangle with sides 5', 5' 6'

EX 2: You are to design a rectangular box with a volume of 64 ft^3 .

a) Draw three sample boxes that fit the requirements.

b) Determine the surface area of each.

c) State the price of each if the materials cost $\$3.00/\text{ft}^2$.