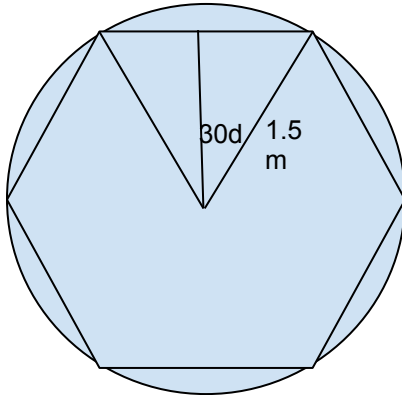


December 2017 Middle School Monthly Math Challenge Solution



Perimeter = [radius] [sin of right angle geom to get the half side length] [twice the number of sides]

$$\text{Perimeter} = [(3.00/2)][(\sin(360/2*6))][(6)(2)] = \underline{9.00 \text{ m}}$$

$$\text{Area} = A = \frac{3\sqrt{3}}{2} a^2 \quad \text{where } a=1.5\text{m: } A = \underline{5.85\text{m}^2}$$