# Macintosh HD:Users:Amit:Progs:ExcelerateLive:HTML:ml.png Excelerate Lesson Plan

**Perimeter and Area**

**About These Problems**

**The perimeter of a polygon is the sum of all its sides. The area of a polygon is how much cross sectional space it takes up in a two dimensional plane. Usually you find the area of a 4-sided polygon by taking its average base and multiplying it by height. Triangles' area is half the base times height. The area of a circle is pi \* r2 where r is the radius and pi = 3.14. The perimeter or circumference of a circle is 2\*pi\*r.**

**Question.**  What is the perimeter and area of a right angle triangle who's shorter sides are 6 and 8?

1. Perimeter = 24 Area = 48
2. Perimeter = 24 Area = 24
3. Perimeter = 20 Area = 12
4. Perimeter = 20 Area = 16
5. Perimeter = 24 Area = 34

**Answer.** **2**: If the triangle is a right triangle, using the Pythagorean theorem we can deduce that the longest side (hypotenuse) is 10.

(62 + 82)(1/2) = 10

Perimeter = 6 + 8 + 10 = 24.

Area = (b \* h)/2 = 8\*6/2 = 24