If you need this document in another format, please email minsu.kim@ung.edu *or call 678-717-3546.*

ROUND #3

Gainesville State College
Mathematics Tournament
April 10, 2010

A giraffe is in a fenced corral in the shape of a right triangle. One leg of the triangle is 10 *meters*, and the hypotenuse is 20 *meters*. Thanks to its long neck, the giraffe can eat greens not only inside of the corral, but also outside, up to 3 *meters* from the fence. What is the total area of feeding available for the giraffe?
Give the approximation to three decimal places.

If you need this document in another format, please email minsu.kim@ung.edu *or call 678-717-3546.*

ROUND #4

Gainesville State College
Mathematics Tournament
April 10, 2010

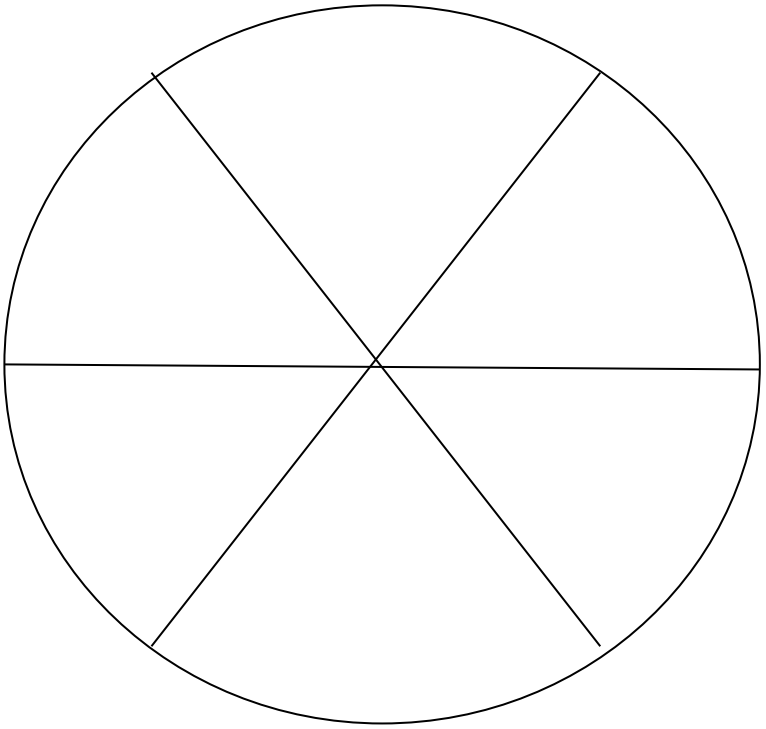
An ***arithmetic sequence*** is a sequence of numbers (called ***terms***) such that the difference between any two consecutive terms is a constant.

How many ***terms*** are there in the following arithmetic sequence?
3, 5.7, 8.4, 11.1, …, 858.9, 861.6, 864.3, 867

~~ROUND~~ #6

Gainesville State College
Mathematics Tournament
April 10, 2010

If a wheel revolves $1\frac{5}{6}$ revolutions per minute, how many degrees does it revolve in one second?



If you need this document in another format, please email minsu.kim@ung.edu or call 678-717-3546.

ROUND #8

Gainesville State College
Mathematics Tournament
April 10, 2010

Three circular arcs of radius 5 *units* bound the plane region shown. Arcs AB and AD are quarter-circles, and arc BCD is a semicircle. What is the area, in *square units*, of

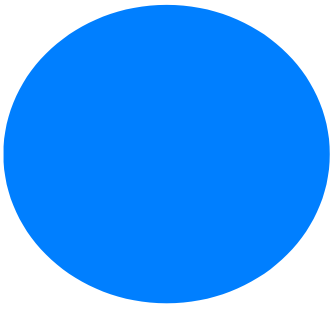
ROUND #10

Gainesville State College
Mathematics Tournament
April 10, 2010

Today, I am twice as old as you were when I was as old as you are today.

Today, our ages added together make 63.

How old is each of us?



If you need this document in another format, please email minsu.kim@ung.edu or call 678-717-3546.