Logic	Professors	The Major	Calculus I	"Category 5"
100	100	100	100	100
200	200	200	200	200
300	300	300	300	300
400	400	400	400	400
500	500	500	500	500

100 POINTS

I am an odd number. Take away one letter and I become even.

⇒ View Answer

**⇒ View Question** 

 $\Rightarrow$  Complete ⇒ Go Home

100 POINTS

→ Complete

⇒ View Answer⇒ View Question

What is seven? (Take away the 's' and it becomes 'even')

200 POINTS

Among the assertions made in this problem there are three errors. What are they?

- (a) 2+2=4
- (b)  $4 \div \frac{1}{2} = 2$
- (c)  $3\frac{1}{5} \times 3\frac{1}{8} = 10$
- (d) 7 (-4) = 11
- (e) -10(6-6) = -10

200 POINTS

r → Complete

⇒ View Answer⇒ View Question

What are (b), (e) and the fact that there aren't three errors?

 $\Rightarrow \mathsf{Complete}$   $\Rightarrow \mathsf{Go} \; \mathsf{Home}$ 

The next symbol in this sequence. TAMBQII

⇒ View Answer

 $\Rightarrow$  Complete ⇒ View Question ⇒ Go Home

What is 65?

**⇒** Complete ⇒ Go Home

### 400 POINTS

A logician vacationing in the South Seas finds himself on an island inhabited by the two proverbial tribes of liars and truth-tellers. Members of one tribe always tell the truth, members of the other always lie. He comes to a fork in the road and has to ask a native bystander which branch he should take to reach a village. He has no way of telling whether the native is a truth-teller or a liar. The logician thinks a moment, then asks *one* question only. From the reply he knows which road to take. What did he ask?

⇒ View Answer⇒ View Question

"If I were to ask you if this road leads to the village, would you say yes?"

400 POINTS

⇒ View Answer

⇒ View Question

### 500 POINTS

An intelligent horse learns arithmetic, algebra, geometry, and trigonometry but is unable to understand the Cartesian coordinates of the analytic geometry. What proverb does this suggest?

 $\Rightarrow$  View Answer  $\Rightarrow$  View Question

**500 POINTS** 

Proverb:

Do not put Descartes before the horse.

⇒ View Answer
⇒ View Question

 $\begin{array}{c|c} & \Rightarrow & \mathsf{Complete} \\ \mathsf{n} & \Rightarrow & \mathsf{Go Home} \end{array}$ 

The current Department Chair.

100 POINTS

**⇒ View Answer** 

**⇒ View Question** 

→ Complete

100 POINTS

Who is Professor Lakins?

**⇒ View Answer** 

**⇒ View Question** 

→ Complete

200 POINTS

The Actuarial Adviser and has a PHD from Yale.

⇒ View Answer

⇒ View Question

 $\Rightarrow$  Complete ⇒ Go Home

200 POINTS

Who is Dr. LoBello?

The Engineering Liaison.

**⇒ View Answer** 

⇒ View Question

**⇒** Complete ⇒ Go Home

Who is Professor Weir?

⇒ Go Home

300 POINTS

**⇒** Complete

**400 POINTS** 

The Dimensions Club Adviser.

**⇒ View Answer** 

**⇒ View Question** 

Who is Professor Werner?

**400 POINTS** 

The ΠΜΕ Adviser.

**500 POINTS** 

**⇒ View Answer** 

**⇒ View Question** 



 $\Rightarrow$  Go Home

Who is Professor Carswell?

- **⇒ View Answer ⇒ View Question** 
  - **⇒** Complete ⇒ Go Home

100 POINTS

⇒ Complete

⇒ Go Home

Mathematics is in this division.

What is Natural Science?

**⇒ View Answer** 

⇒ View Question

**⇒** Complete ⇒ Go Home

200 POINTS

The number of credits required for the Math major at Allegheny.

⇒ View Answer

 $\Rightarrow$  Complete **⇒ View Question** ⇒ Go Home

What is 43?

- **⇒** Complete ⇒ Go Home

300 POINTS

The number of credits required for a Math minor at Allegheny.

⇒ View Answer
⇒ View Question

 $\begin{array}{ccc} \Rightarrow & \mathsf{Complete} \\ \mathsf{Domplete} \\ \Rightarrow & \mathsf{GoHome} \\ \end{array}$ 

What is 24?

**⇒** Complete ⇒ Go Home

**400 POINTS** 

The required 300 level courses for a Math Major.

⇒ View Answer

 $\Rightarrow$  Complete ⇒ View Question ⇒ Go Home

400 POINTS

Linear Algebra (320) Algebraic Structures I (325) Introduction to Analysis (340)

⇒ View Answer⇒ View Question

 $\Rightarrow$  Complete  $\Rightarrow$  Go Home

The 400 level Math courses.

**500 POINTS** 

⇒ Complete

⇒ Go Home

500 POINTS

Topology (400) Algebraic Structures II (425) Real Analysis (440)

⇒ View Answer⇒ View Question

 $\Rightarrow$  Complete  $\Rightarrow$  Go Home

 $\int \frac{dx}{5-3x}$ 

→ View Answer

**⇒** Complete  $\Rightarrow$  Go Home

 $-\frac{1}{3}ln|5-3x|+C$ 

100 POINTS

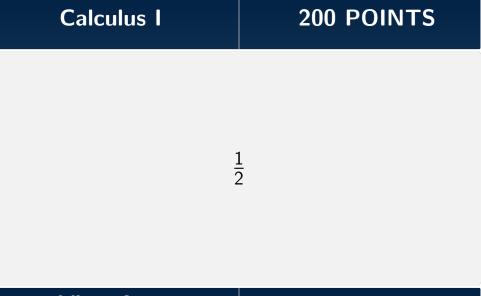
⇒ View Answer

**⇒ View Question** 

 $\Rightarrow$  Complete ⇒ Go Home

200 POINTS

```
\lim_{x \to \frac{\pi}{2}} \frac{1-\sin(x)}{\cos(x)^2}
```



⇒ View Answer  $\Rightarrow$  Complete **⇒ View Question** ⇒ Go Home

300 POINTS

The values of a and b such that the line 2x + y = b is tangent to the parabola  $y = ax^2$  when x = 2.

⇒ View Answer⇒ View Question

 $egin{array}{ccc} {\sf r} & & \Rightarrow {\sf Complete} \ {\sf on} & & \Rightarrow {\sf Go\ Home} \ \end{array}$ 

# Calculus I 300 POINTS $a = -\frac{1}{2}$ b = 2

⇒ View Answer

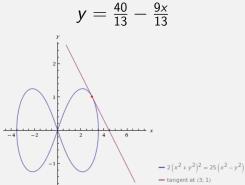
⇒ View Question

⇒ Complete ⇒ Go Home

400 POINTS

The equation of the line tangent to  $2(x^2 + y^2)^2 = 25(x^2 - y^2)$  at the point (3, 1).

 $\Rightarrow$  Complete  $\Rightarrow$  Go Home





$$\int \frac{3x^3 - 17x^2 + 36x - 35}{x^2 - 4x + 4} dx$$

 $\Rightarrow$  Complete

⇒ View Answer **⇒ View Question** 

⇒ Go Home

500 POINTS

 $\frac{3}{2}x^2 - 5x + 4\ln|x - 2| + \frac{7}{x - 2} + C$ 

 $\Rightarrow$  Complete ⇒ Go Home

100 POINTS

The year in which Allegheny College was founded.

⇒ View Answer

 $\Rightarrow$  Complete ⇒ View Question  $\Rightarrow$  Go Home

# "Category 5" 100 POINTS

What is 1815?

**⇒ View Answer** 

⇒ View Question

 $oxed{igwedge} \Rightarrow \mathsf{Complete}$ 

⇒ Go Home

200 POINTS

The course number of the Mathematics Junior Seminar.

⇒ View Answer⇒ View Question

 $\Rightarrow$  Complete  $\Rightarrow$  Go Home

# "Category 5" 200 POINTS

 $\Rightarrow$  Complete

⇒ Go Home

What is 585?

**⇒ View Answer** 

⇒ View Question

The 6th Fibonacci number.

→ Complete

300 POINTS

⇒ View Answer⇒ View Question

⇒ Complete ⇒ Go Home

What is 5?

**⇒ View Answer** 

⇒ View Question







### 400 POINTS

The number that always results from the following:

- 1. Choose any number.
- 2. Add the next highest number to that number.
- 3. Add 9.
- 4. Divide by 2.
- 5. Subtract the original number.

 $\Rightarrow$  Complete

# "Category 5" 400 POINTS

What is 5?

**⇒ View Answer** 

⇒ View Question

 $oxed{oxed}$   $\Rightarrow$  Complete

⇒ Go Home

The number of times can you take 5 from 25.

⇒ View Answer

⇒ View Question

 $\Rightarrow$  Complete  $\Rightarrow$  Go Home

What is 1? (Then it becomes 20)

⇒ View Answer

 $\Rightarrow$  View Answer  $\Rightarrow$  Complete  $\Rightarrow$  View Question  $\Rightarrow$  Go Home