Collected papers of

Lord Soumadeep Ghosh

Volume 29

My endorsed candidate for the position of President of India in the 2024 elections in India

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I nominate my endorsed candidate for the position of President of India in the 2024 elections in India. The paper ends with "The End"

Introduction

Knowledge has been demanded of me of my endorsed candidate for the position of President of India in the 2024 elections in India.

In this paper, I nominate my endorsed candidate for the position of President of India in the 2024 elections in India.

My endorsed candidate for the position of President of India in the 2024 elections in India

My endorsed candidate for the position of President of India in the 2024 elections in India is 4 time M.P. Asaduddin Owaisi of the Hyderabad constituency.

My reasons for my endorsement

My reasons for my endorsement are:

1. Asaduddin Owaisi is from the constituency of Hyderabad, India, where "Hinduism" and "Hinduism continues" were originally written.
2. Asaduddin Owaisi is a principled lawyer with a B.A. from the prestigious Osmania University of India.
3. Asaduddin Owaisi actually knows economics, philosophy and political science unlike certain uneducated leaders.
4. Asaduddin Owaisi knows the ills that plague Indian society as of this writing, namely, religious fervor among Indians in several states spilling over into illegal actions.
5. Asaduddin Owaisi already realizes the ugly, heinous fact that shall be common knowledge soon after the role of Narendra Modi during the Gujarat pogrom is properly probed.
6. Asaduddin Owaisi knows that, as of this writing, minorities in India, including muslims, are being systematically marginalized, ill-treated and/or mistreated.
7. Thus, Asaduddin Owaisi can supply justice to the nation both as a lawyer and as a muslim.

The End

My endorsed disciple for the position of Prime Minister of India in the 2024 elections in India

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I nominate my endorsed disciple for the position of Prime Minister of India in the 2024 elections in India. The paper ends with "The End"

Introduction

Knowledge has been demanded of me of my endorsed disciple for the position of Prime Minister of India in the 2024 elections in India.

In this paper, I nominate my endorsed disciple for the position of Prime Minister of India in the 2024 elections in India.

My endorsed disciple for the position of Prime Minister of India in the 2024 elections in India

My endorsed disciple for the position of Prime Minister of India in the 2024 elections in India is M.P. and the Chair of the Indian National Congress, Rahul Gandhi.

My reasons for my endorsement

My reasons for my endorsement are:

1. Rahul Gandhi was and is the most popular leader of the youth of the nation.
2. Rahul Gandhi has had first-hand experience of rule under Narendra Modi in New Delhi.
3. Rahul Gandhi has finished defense studies and has found evidence against Narendra Modi.
4. Rahul Gandhi is the scion of the Nehru-Gandhi family but has also realized that good politics is more than just impunity to act with violence.
5. Rahul Gandhi was the original choice of the nation before Narendra Modi tried to usurp his position.
6. Thus, Rahul Gandhi is now the well-experienced and well-tested choice for the position of Prime Minister.

The End

Financial attention

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe financial attention.
The paper ends with "The End"

Introduction

In this paper, I describe financial attention for economists, statisticians and financiers.

Financial attention

When $p_r(t) \neq 0 \wedge r_f(t) \neq 0$,

$$a(t) = 1 - e^{\left(1 - \frac{\frac{p_r(t+1)}{p_r(t)} - 1}{r_f(t)}\right)}$$

where
$a(t)$ is financial attention as a function of time
e is the base of natural logarithm
$p_r(t)$ is risk premium as a function of time
$r_f(t)$ is risk-free rate as a function of time

The End

Two approximate solutions to $sinc(xy) = c$ where $0 < c < 1$ and $x > 0$

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe two approximate solutions to $sinc(xy) = c$ where $0 < c < 1 \wedge x > 0$. The paper ends with "The End"

Introduction

Solving the equation

$$sinc(xy) = c$$

where $0 < c < 1 \wedge x > 0$

is important to the fields of electronics engineering, instrumentation engineering and communication.

In this paper, I describe two approximate solution to $sinc(xy) = c$ where $0 < c < 1 \wedge x > 0$.

Two approximate solutions to $sinc(xy) = c$ where $0 < c < 1 \wedge x > 0$

For $0 < c < 1 \wedge x > 0$,

$$y_1 = \sqrt{\frac{2\sqrt[3]{7}\sqrt[3]{\sqrt{5}\sqrt{405c^2x^{24} + 198cx^{24} + 62x^{24}} - 45cx^{12} - 11x^{12}}}{x^6} - \frac{6\ 7^{2/3}x^2}{\sqrt[3]{\sqrt{5}\sqrt{405c^2x^{24} + 198cx^{24} + 62x^{24}} - 45cx^{12} - 11x^{12}}} + \frac{14}{x^2}}$$

and $y_2 = -y_1$

are two approximate solutions.

The End

The mathematics of growth, terror and peace

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the mathematics of growth, terror and peace.
The paper ends with "The End"

Introduction

Knowledge has been demanded of me of the mathematics of growth, terror and peace. In this paper, I describe the mathematics of growth, terror and peace.

The mathematics of growth, terror and peace

The mathematics of growth, terror and peace is

$$G(1 + r_f + p_g) = (1 - t)G(1 + \gamma - \tau) - tT$$

$$G(1 + r_f + p_g + p_T) = t(G - \chi T)(1 + \tau) + (1 - t)G(1 + \gamma)$$

$$\gamma - \tau = p_p$$

where

G is GDP
r_f is the risk-free rate
p_g is the risk premium for growth
p_T is the risk premium for terror
$0 \leq t \leq 1$ is the probability of terror
$0 \leq (1 - t) \leq 1$ is the probability of no terror
χ is the **coefficient of spillover** of terror to GDP
$T \geq 0$ is the loss of GDP due to terror
τ is the growth rate during terror
γ is the growth rate without terror
p_p the **peace premium**

The End

14 solutions to the mathematics of growth, terror and peace

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to the mathematics of growth, terror and peace.
The paper ends with "The End"

Introduction

In a previous paper, I've described the mathematics of growth, terror and peace.
In this paper, I describe 14 solutions to the mathematics of growth, terror and peace.

14 solutions to the mathematics of growth, terror and peace

1. $G = 58, r_f = \frac{4}{17}, p_g = 40, p_T = \frac{38}{3}, t = \frac{72}{203}, \gamma = 65, \tau = \frac{85}{46}, \chi = -\frac{225658244}{10194027}, T = \frac{752231}{28152}, p_p = \frac{2905}{46}$

2. $G = 390, r_f = \frac{10}{51}, p_g = 40, p_T = \frac{20}{3}, t = \frac{69}{203}, \gamma = \frac{12131}{197}, \tau = \frac{15}{149}, \chi = -\frac{279853516331}{2270779916}, T = \frac{1800008470}{34431069}, p_p = \frac{1804564}{29353}$

3. $G = 523, r_f = \frac{13}{34}, p_g = 74, p_T = \frac{17}{2}, t = \frac{67}{203}, \gamma = 195, \tau = \frac{17107}{206}, \chi = \frac{3669296102}{1201297131}, T = \frac{108868203}{234634}, p_p = \frac{23063}{206}$

4. $G = 544, r_f = \frac{7}{102}, p_g = 88, p_T = 43, t = \frac{19}{203}, \gamma = 153, \tau = \frac{54485}{979}, \chi = \frac{254421925747}{81873904632}, T = \frac{23618608}{55803}, p_p = \frac{95302}{979}$

5. $G = 549, r_f = \frac{7}{34}, p_g = 22, p_T = \frac{9}{5}, t = \frac{20}{203}, \gamma = \frac{154625}{6222}, \tau = \frac{84}{925}, \chi = -\frac{276866375}{3156152}, T = \frac{429318}{4625}, p_p = \frac{142505477}{5755350}$

6. $G = 690, r_f = \frac{10}{51}, p_g = 16, p_T = \frac{75}{7}, t = \frac{13}{29}, \gamma = 38, \tau = \frac{961}{125}, \chi = -\frac{202085875}{55870899}, T = \frac{676154}{5525}, p_p = \frac{3789}{125}$

7. $G = 737, r_f = \frac{91}{102}, p_g = 97, p_T = \frac{5}{2}, t = \frac{80}{203}, \gamma = 240, \tau = \frac{12047}{156}, \chi = \frac{6337381440}{2242581919}, T = \frac{135440701}{212160}, p_p = \frac{25393}{156}$

8. $G = 782, r_f = \frac{41}{102}, p_g = 32, p_T = \frac{9}{4}, t = \frac{57}{203}, \gamma = \frac{1690}{37}, \tau = \frac{2}{217}, \chi = -\frac{129792997187}{11731396818}, T = \frac{616032253}{1372959}, p_p = \frac{366656}{8029}$

9. $G = 782, r_f = \frac{41}{102}, p_g = 32, p_T = \frac{9}{4}, t = \frac{57}{203}, \gamma = \frac{682543}{14892}, \tau = \frac{46}{259}, \chi = -\frac{89251659}{9817340}, T = \frac{6292754}{14763}, p_p = \frac{176093605}{3857028}$

10. $G = 790, r_f = \frac{14}{17}, p_g = 73, p_T = \frac{9}{2}, t = \frac{99}{203}, \gamma = 201, \tau = \frac{5890}{107}, \chi = \frac{4069367183}{2050014480}, T = \frac{135026800}{180081}, p_p = \frac{15617}{107}$

11. $G = 930, r_f = \frac{16}{17}, p_g = 43, p_T = 1, t = \frac{99}{203}, \gamma = \frac{155007}{1768}, \tau = \frac{6}{107}, \chi = \frac{6313}{1126497}, T = \frac{1030130}{1177}, p_p = \frac{16575141}{189176}$

12. $G = 977, r_f = \frac{49}{51}, p_g = 26, p_T = \frac{33}{4}, t = \frac{81}{203}, \gamma = \frac{287387}{6222}, \tau = \frac{10}{17}, \chi = -\frac{564553}{5652}, T = \frac{153389}{1377}, p_p = \frac{283727}{6222}$

13. $G = 1007, r_f = \frac{12}{17}, p_g = 80, p_T = \frac{39}{2}, t = \frac{90}{203}, \gamma = \frac{18561}{127}, \tau = \frac{49}{275}, \chi = -\frac{1244429036125}{8262869616}, T = \frac{6420300697}{26717625}, p_p = \frac{5098052}{34925}$

14. $G = 1218, r_f = \frac{23}{51}, p_g = 52, p_T = 13, t = \frac{80}{203}, \gamma = \frac{1140}{13}, \tau = \frac{61}{212}, \chi = -\frac{73820542048}{890736483}, T = \frac{662342513}{1874080}, p_p = \frac{240887}{2756}$

The End

14 alternative solutions to the trinomial model of stock pricing using 3 simple rules

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 alternative solutions to the trinomial model of stock pricing using 3 simple rules.
The paper ends with "The End"

Introduction

In a previous paper, I've described 14 solutions to the trinomial model of stock pricing with zero risk-free rate, zero option premium and constant stock price.
Contrary to popular belief, there exist 14 alternative solutions to the trinomial model of stock pricing using 3 simple rules.
In this paper, I describe 14 alternative solutions to the trinomial model of stock pricing using 3 simple rules.

14 alternative solutions to the trinomial model of stock pricing using 3 simple rules

Using the 3 simple rules

1. $\delta = uS^2$ where $u > 0$
2. $\epsilon = dS^2$ where $0 \leq d \leq 1$
3. $pu = qd$

we obtain 14 alternative solutions to the trinomial model of stock pricing using 3 simple rules:

1. $S = 9, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 9, d = \frac{3}{17}$

2. $S = 48, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 35, d = \frac{7}{34}$

3. $S = 360, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 23, d = \frac{2}{3}$

4. $S = 390, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 20, d = \frac{20}{51}$

5. $S = 549, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 21, d = \dfrac{11}{51}$

6. $S = 603, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 90, d = \dfrac{59}{102}$

7. $S = 782, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 41, d = \dfrac{16}{51}$

8. $S = 930, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 96, d = \dfrac{43}{102}$

9. $S = 977, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 98, d = \dfrac{13}{51}$

10. $S = 1007, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 72, d = \dfrac{40}{51}$

11. $S = 1039, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 15, d = \dfrac{19}{51}$

12. $S = 1062, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 91, d = \dfrac{28}{51}$

13. $S = 1218, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 46, d = \dfrac{26}{51}$

14. $S = 1247, r_f = 0, p_o = 0, p = 0, q = 0, r = 1, u = 20, d = \dfrac{31}{34}$

The End

Yoga 101

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the first course of yoga (also known as Yoga 101). The paper ends with "The End"

Introduction

In this paper, I describe the first course of yoga (also known as Yoga 101).

Yoga 101

There are only 3 steps in the first course of yoga:

1. Complete identification and identify completeness.
2. Transcend transitivity and transit to transcendence.
3. Reflexively reflect on reflexivity.

The End

Ghosh's double dragon curve

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe my double dragon curve. The paper ends with "The End"

Introduction

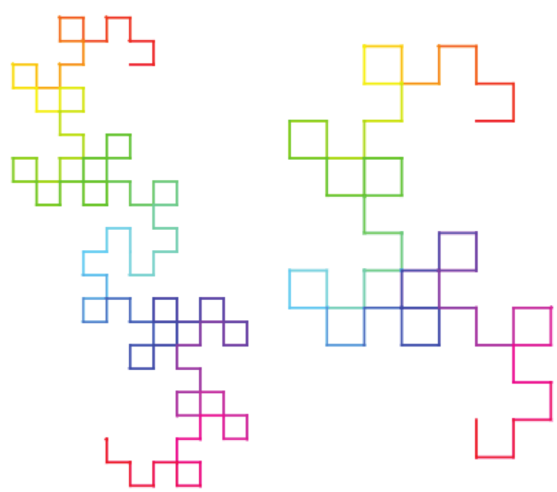
Lindenmayer systems can be used to construct useful curves, sometimes even fractal curves. In this paper, I describe my double dragon curve.

Ghosh's double dragon curve

My **double dragon curve** can be written as a Lindenmayer system with

1. Angle: 90^o
2. Initial string: FXY
3. String rewriting rules:
   (a) $X \rightarrow X + YF-$
   (b) $Y \rightarrow +FX - Y$

Plot of Ghosh's double dragon curve (compared to the dragon curve)



The End

Ghosh's india curve

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe my india curve. The paper ends with "The End"

Introduction

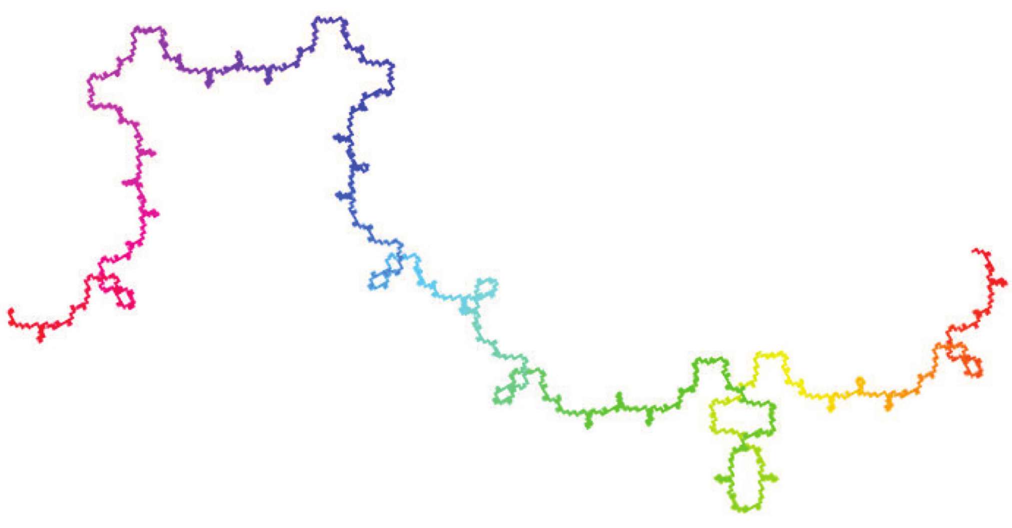
Lindenmayer systems can be used to construct useful curves, sometimes even fractal curves. In this paper, I describe my india curve.

Ghosh's india curve

My **india curve** can be written as a Lindenmayer system with

1. Angle: 90^o
2. Initial string: XY
3. String rewriting rules:
   (a) $X \rightarrow XY - YXF+$
   (b) $Y \rightarrow -FXY + YX$

Plot of Ghosh's india curve with a suitable rotation



The End

Date: 27 July 2023
From:
7C, Tower 1, Gennex Valley
Joka, Kolkata - 700104

To:
The Queen of India

Her Royal Highness,

I hope this letter finds you and His Royal Highness, the King, in good health and spirit.

I write this letter with a heavy heart, for the knowledge contained in it is disturbing.

The self-styled Prime Minister of India, Narendra Damodardas Modi, has committed **TREASON** against the people of India, the details of which, as you perhaps know, I've already published about.

There is no doubt about this fact, for there is plenty of evidence against Narendra Damodardas Modi.

While I don't know for sure, in all possibility, several more individuals are involved in this treacherous Act.

I beseech you to initiate your own lines of inquiry and I hope that justice will be served in this nation and the Empire, sooner rather than later.

Yours truly,
Lord Soumadeep Ghosh
Kolkata, India

The curse on the English economy

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the curse on the English economy.
The paper ends with "The End"

Introduction

In a previous paper, I've described how I, the representative agent of economics, have a **limited** ability to foresee all possible futures of the global economy on a macroscopic level.
All economies, including the English economy, benefit from my limited ability since they gain knowledge from me of the remaining economies.
But not all economies prefer that I have my limited ability. One of them, in particular, is the English economy.
In this paper, I describe the result of this preference of the English economy - **the curse on the English economy**.

The curse on the English economy

The English economy keeps secrets.
But my limited ability to foresee all possible futures of the global economy on a macroscopic level ends up discovering most of those secrets.
Thus the English economy tries to take away my limited ability.
But as I'm the representative agent of economics, the remaining economies prevent the English economy from taking away my limited ability, including sometimes through war.
That, in turn, causes the English economy to keep more secrets and the cycle repeats.
This is the curse on the English economy.

The End

Principles of criminology

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the principles of criminology.
The paper ends with "The End"

Introduction

Knowledge has been demanded of me of the principles of criminology.
While law is a state subject and jurisdiction is a judicial subject, the principles of criminology are unalienable to all individuals, innocent or guilty of any crime.
In this paper, I describe the principles of criminology.

The principles of criminology

1. An individual is innocent of an accused crime until proven otherwise in a court of law with jurisdiction over the individual.
2. An individual's premises cannot be searched except with a search warrant issued by a court of law with jurisdiction over the premises.
3. No individual can be arrested by the police except with an arrest warrant issued by a court of law with jurisdiction over the individual.
4. Force cannot be used on any individual by the police except when that individual poses a threat to other individual(s).
5. Every individual has the right to remain silent and not incriminate themself.
6. Anything said by an individual in a police station can be used as evidence against that individual in a court of law.
7. No individual can be tried in a court of law without the presence of a lawyer defending that individual and a lawyer representing the accuser.
8. No judgment can be passed in a court of law against an individual without the defendant facing and cross-examining the accuser and the accuser facing and cross-examining the defendant.
9. Leniency in judgment against an individual is allowed at the discretion of the judiciary for good behavior in court or jail.
10. Capital punishment cannot be decreed on any well-known politician for reasons of political injustice.
11. Capital punishment is to be reserved only for the most hardened criminals for humane reasons.

The End

The three constituents of a crime

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe the three constituents of a crime.
The paper ends with "The End"

Introduction

Knowledge has been demanded of what exactly constitutes a crime.
In this paper, I describe the three constituents of a crime.

The three constituents of a crime

For an act to be classified as a crime, the following three constituents of a crime must be satisfied:

1. The intent to commit the crime
2. The motive of the crime
3. The ability to commit the crime

If the accuser cannot prove all three constituents of a purported act that may be a crime in a court of law, the purported act is not a crime.

The End

A solution to the model of skirmish

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe a solution to the model of skirmish.
The paper ends with "The End"

Introduction

In a previous paper, I've described a model of skirmish based on the Y and Z scores of the states.
In this paper, I describe a solution to the model of skirmish.

A solution to the model of skirmish

$$Z_A = \alpha_A \log(101) + \log(204)$$

$$Z_B = \alpha_B \log(51) + \log(2704)$$

$$Y_A = \alpha_A \log(101)$$

$$Y_B = \alpha_B \log(51) + \log(52)$$

$$o_A = \frac{\sqrt{\frac{\log(52)}{\log(204)}}}{\sqrt[4]{e}}$$

$$o_B = 1$$

$$A = \frac{1}{2}$$

$$t = 1$$

The End

14 solutions to the model of nuclear war

Soumadeep Ghosh

Kolkata, India

Abstract

In this paper, I describe 14 solutions to the model of nuclear war.
The paper ends with "The End"

Introduction

In a previous paper, I've described a model of nuclear war based on the Y and Z scores of the states.
In this paper, I describe 14 solutions to the model of nuclear war.

14 solutions to the model of nuclear war

1. $n_A = 9, n_B = 9, \beta_A = 18, \gamma_A = 92, \beta_B = 3, \gamma_B = 60, M_A = 73, W_A = 46, P_A = 75, M_B = 50, W_B = 12, P_B = 77, m_A = \frac{101}{3}, m_B = \frac{31}{9},$

$$D_A = 74, D_B = \frac{148\left(46\log\left(\frac{75}{2}\right) + 9\log\left(\frac{138}{37}\right)\right)}{3\left(20\log\left(\frac{77}{27}\right) + \log\left(\frac{108}{77}\right)\right)}$$

2. $n_A = 48, n_B = 35, \beta_A = 21, \gamma_A = 70, \beta_B = 49, \gamma_B = 23, M_A = 68, W_A = 41, P_A = 72, M_B = 44, W_B = 28, P_B = 105, m_A = \frac{70}{3}, m_B = \frac{11}{2},$

$$D_A = 30, D_B = \frac{1225\left(10\log(18) + 3\log\left(\frac{123}{53}\right)\right)}{8\left(49\log\left(\frac{56}{45}\right) + 23\log\left(\frac{105}{61}\right)\right)}$$

3. $n_A = 360, n_B = 23, \beta_A = 68, \gamma_A = 94, \beta_B = 32, \gamma_B = 94, M_A = 30, W_A = 53, P_A = 78, M_B = 68, W_B = 20, P_B = 84, m_A = \frac{75}{2}, m_B = \frac{91}{6}$

$$D_A = 8, D_B = \frac{23\left(47\log\left(\frac{13}{8}\right) + 34\log\left(\frac{106}{31}\right)\right)}{45\left(47\log\left(\frac{21}{4}\right) + 16\log\left(\frac{120}{29}\right)\right)}$$

4. $n_A = 390, n_B = 20, \beta_A = 40, \gamma_A = 20, \beta_B = 69, \gamma_B = 34, M_A = 99, W_A = 61, P_A = 135, M_B = 80, W_B = 37, P_B = 136, m_A = 28, m_B = \frac{16}{3}$

$$D_A = 20, D_B = \frac{800 \log\left(\frac{18605}{1452}\right)}{39\left(34\log\left(\frac{17}{7}\right) + 69\log\left(\frac{111}{95}\right)\right)}$$

5. $n_A = 549, n_B = 21, \beta_A = 22, \gamma_A = 9, \beta_B = 20, \gamma_B = 33, M_A = 65, W_A = 4, P_A = 135, M_B = 79, W_B = 69, P_B = 142, m_A = \frac{89}{26}, m_B = \frac{17}{2},$

$$D_A = 41, D_B = \frac{287\left(9\log\left(\frac{27}{14}\right) + 22\log\left(\frac{104}{15}\right)\right)}{183\left(33\log\left(\frac{142}{63}\right) + 20\log\left(\frac{138}{121}\right)\right)}$$

6. $n_A = 603, n_B = 90, \beta_A = 59, \gamma_A = 35, \beta_B = 95, \gamma_B = 93, M_A = 8, W_A = 90, P_A = 50, M_B = 29, W_B = 24, P_B = 128, m_A = 33, m_B = \frac{36}{5},$

$$D_A = 52, D_B = \frac{520\left(59\log\left(\frac{30}{19}\right) + 35\log\left(\frac{25}{21}\right)\right)}{67\left(95\log\left(\frac{10}{7}\right) + 93\log\left(\frac{128}{99}\right)\right)}$$

7. $n_A = 782, n_B = 41, \beta_A = 32, \gamma_A = 9, \beta_B = 57, \gamma_B = 61, M_A = 38, W_A = 6, P_A = 52, M_B = 32, W_B = 7, P_B = 120, m_A = \frac{86}{17}, m_B = \frac{19}{15}$

$$D_A = 56, D_B = \frac{1148\left(9\log\left(\frac{26}{7}\right) + 32\log\left(\frac{51}{8}\right)\right)}{391\left(61\log\left(\frac{15}{11}\right) + 57\log\left(\frac{105}{86}\right)\right)}$$

8. $n_A = 930, n_B = 96, \beta_A = 43, \gamma_A = 3, \beta_B = 99, \gamma_B = 92, M_A = 60, W_A = 29, P_A = 141, M_B = 1, W_B = 64, P_B = 55, m_A = \frac{93}{4}, m_B = \frac{57}{2}$

$$D_A = 12, D_B = \frac{192\left(43\log\left(\frac{116}{23}\right) + 3\log\left(\frac{47}{27}\right)\right)}{155\left(92\log\left(\frac{55}{54}\right) + 99\log\left(\frac{128}{71}\right)\right)}$$

9. $n_A = 977, n_B = 98, \beta_A = 26, \gamma_A = 33, \beta_B = 81, \gamma_B = 76, M_A = 100, W_A = 49, P_A = 190, M_B = 21, W_B = 24, P_B = 61, m_A = \frac{38}{3}, m_B = \frac{72}{5}$

$$D_A = 2, D_B = \frac{196\left(33\log\left(\frac{19}{9}\right) + 26\log\left(\frac{147}{109}\right)\right)}{977\left(81\log\left(\frac{5}{2}\right) + 76\log\left(\frac{61}{40}\right)\right)}$$

10. $n_A = 1007, n_B = 72, \beta_A = 80, \gamma_A = 39, \beta_B = 90, \gamma_B = 47, M_A = 76, W_A = 44, P_A = 152, M_B = 84, W_B = 73, P_B = 93, m_A = 33, m_B = \frac{55}{2}$

$$D_A = 6, D_B = \frac{85968 \log(2)}{1007 \left(47 \log\left(\frac{31}{3}\right) + 90 \log\left(\frac{146}{91}\right)\right)}$$

11. $n_A = 1039, n_B = 15, \beta_A = 38, \gamma_A = 23, \beta_B = 18, \gamma_B = 86, M_A = 61, W_A = 31, P_A = 85, M_B = 54, W_B = 39, P_B = 128, m_A = \frac{17}{4}, m_B = \frac{67}{3}$

$$D_A = 83, D_B = \frac{1245 \left(23 \log\left(\frac{85}{24}\right) + 38 \log\left(\frac{124}{107}\right)\right)}{2078 \left(43 \log\left(\frac{64}{37}\right) + 9 \log\left(\frac{117}{50}\right)\right)}$$

12. $n_A = 1062, n_B = 91, \beta_A = 56, \gamma_A = 21, \beta_B = 83, \gamma_B = 101, M_A = 84, W_A = 9, P_A = 92, M_B = 8, W_B = 79, P_B = 32, m_A = \frac{25}{6}, m_B = \frac{73}{2}$

$$D_A = 17, D_B = \frac{10829 \left(3 \log\left(\frac{23}{2}\right) + 8 \log\left(\frac{54}{29}\right)\right)}{1062 \left(101 \log\left(\frac{4}{3}\right) + 83 \log\left(\frac{158}{85}\right)\right)}$$

13. $n_A = 1218, n_B = 46, \beta_A = 52, \gamma_A = 26, \beta_B = 80, \gamma_B = 75, M_A = 32, W_A = 39, P_A = 45, M_B = 91, W_B = 97, P_B = 96, m_A = \frac{80}{3}, m_B = 39$

$$D_A = 14, D_B = \frac{1196 \log\left(\frac{47385}{1369}\right)}{435 \left(15 \log\left(\frac{96}{5}\right) + 16 \log\left(\frac{97}{58}\right)\right)}$$

14. $n_A = 1247, n_B = 20, \beta_A = 93, \gamma_A = 20, \beta_B = 80, \gamma_B = 34, M_A = 33, W_A = 85, P_A = 76, M_B = 78, W_B = 26, P_B = 123, m_A = 10, m_B = \frac{77}{4}$

$$D_A = 39, D_B = \frac{390 \left(93 \log\left(\frac{17}{15}\right) + 20 \log\left(\frac{76}{43}\right)\right)}{1247 \left(17 \log\left(\frac{41}{15}\right) + 40 \log\left(\frac{104}{27}\right)\right)}$$

The End