



RENIECYT - LATINDEX - Research Gate - DULCINEA - CLASE - Sudoc - HISPANA - SHERPA

UNIVERSIA - E-Revistas - Google Scholar - DOI - REDIB - Mendeley - DIALNET - ROAD - ORCID

Title: Modelo fractal de la Economía Boliviana

Author: María RAMOS-ESCAMILLA

Editorial label ECORFAN: 607-8324
BECORFAN Control Number: 2017-01
BECORFAN Classification (2017): 051017-0103

Pages: 23
Mail: contacto@ecorfan.org
RNA: 03-2010-032610115700-14

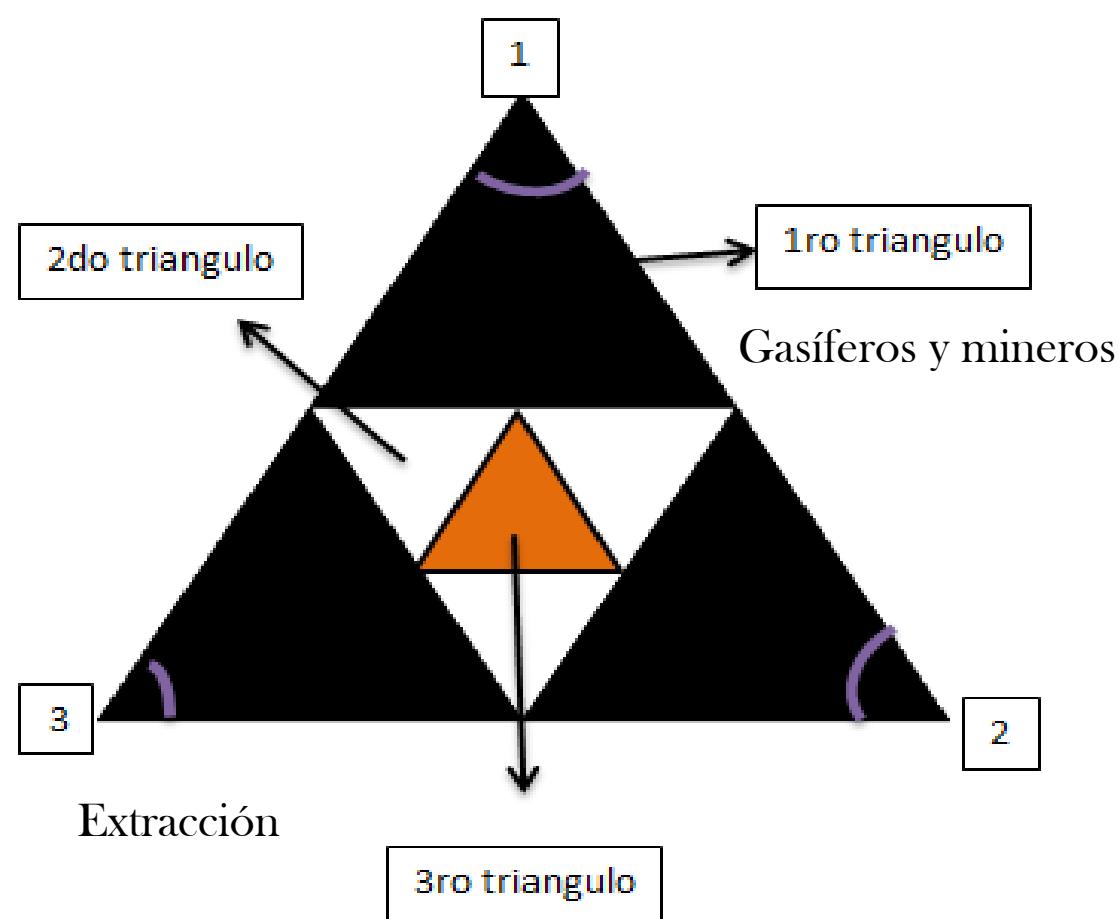
ECORFAN-México, S.C.

244 – 2 Itzopan Street
La Florida, Ecatepec Municipality
Mexico State, 55120 Zipcode
Phone: +52 1 55 6159 2296
Skype: ecorfan-mexico.s.c.
E-mail: contacto@ecorfan.org
Facebook: ECORFAN-México S. C.
Twitter: @EcorfanC

www.ecorfan.org

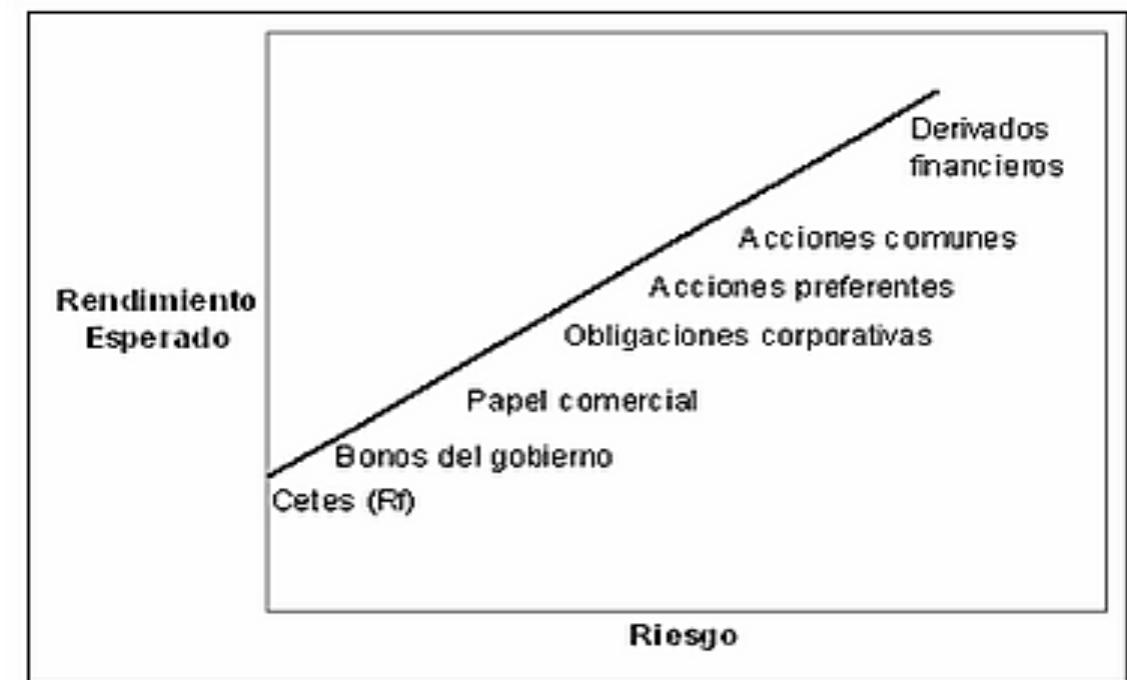
Holdings

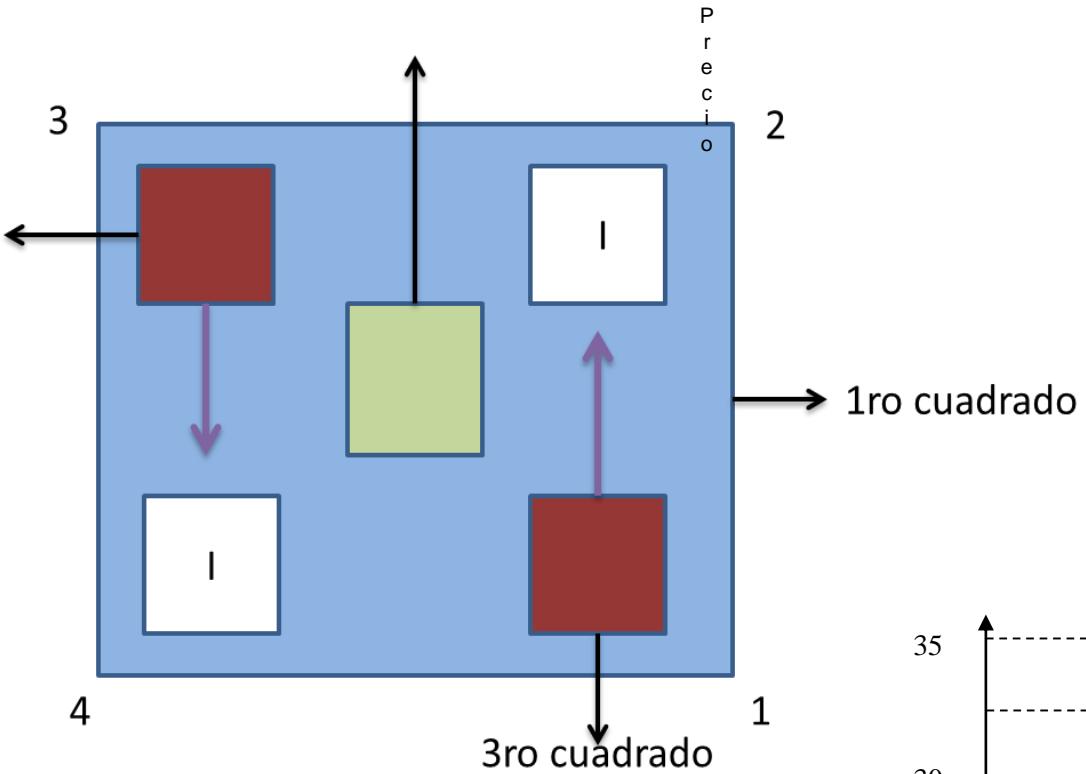
Bolivia	Honduras	China	Nicaragua
Cameroon	Guatemala	France	Republic of the Congo
El Salvador	Colombia	Ecuador	Dominica
Peru	Spain	Cuba	Haití
Argentina	Paraguay	Costa Rica	Venezuela
Czech Republic			



Parte real (R) = 3

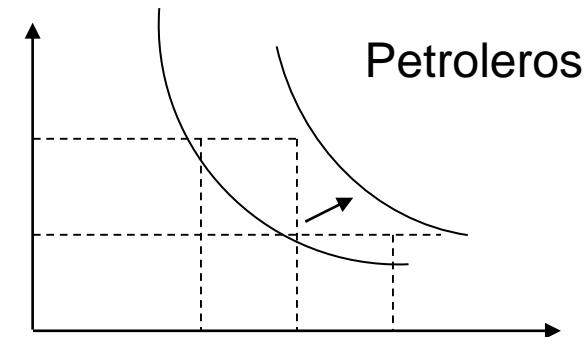
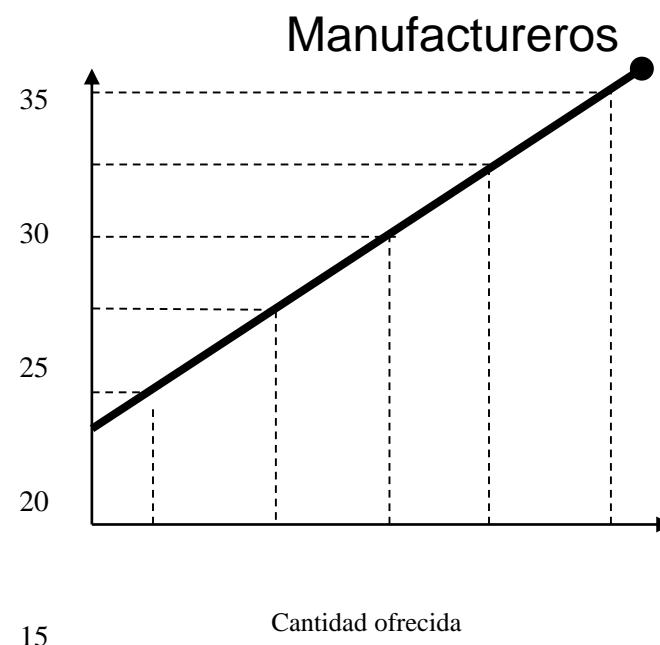
Parte imaginario (I) = 7



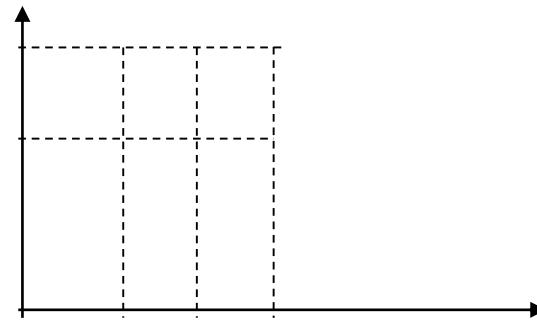


$$Rr = (F) \int_4^5 \frac{d}{dIV}$$

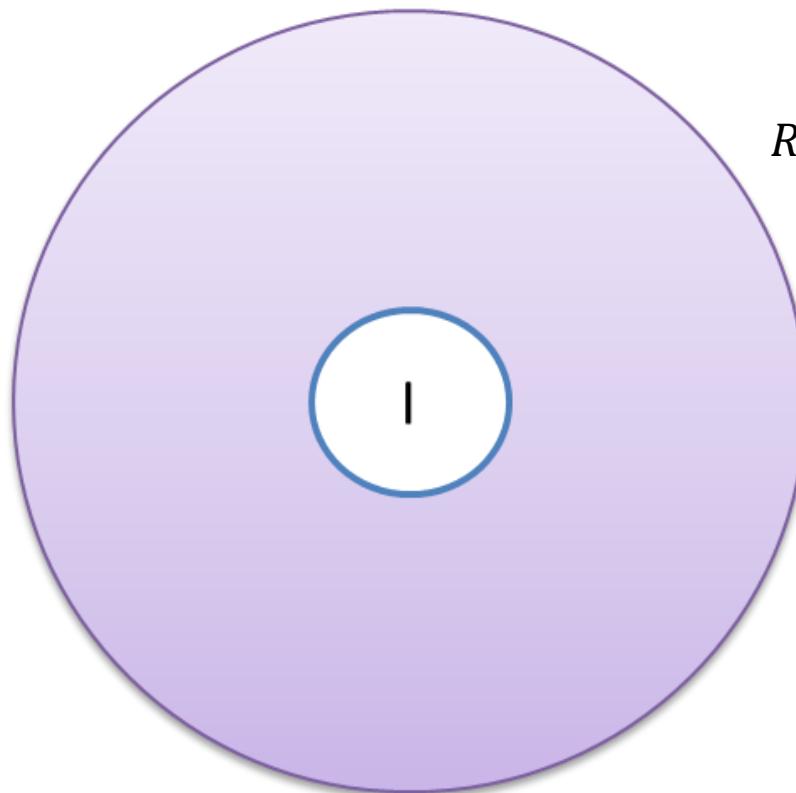
Real = 4
Imag = 5



Alimenticios



Plantas



$$Rr = (F) \int \frac{d}{d}$$

Real = 1

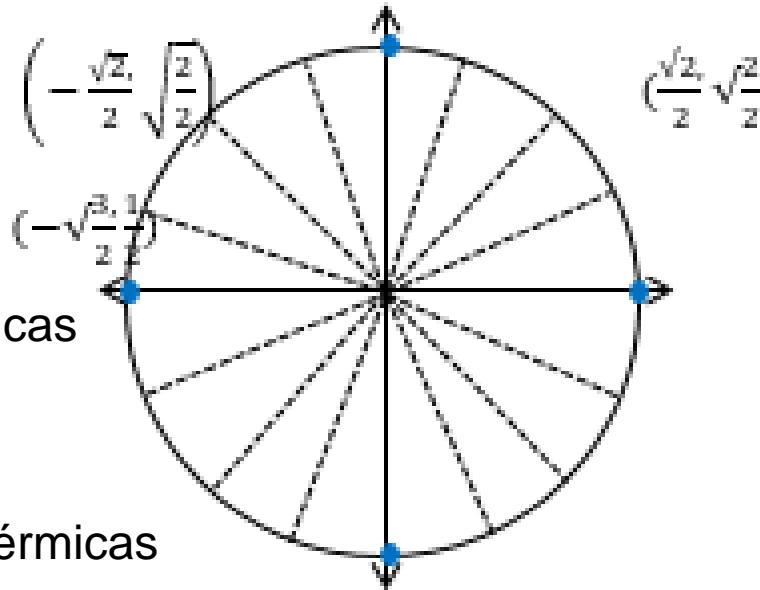
Imag = 1

Termoeléctricas

$$\left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$

$$\left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$

Fotovoltaicas



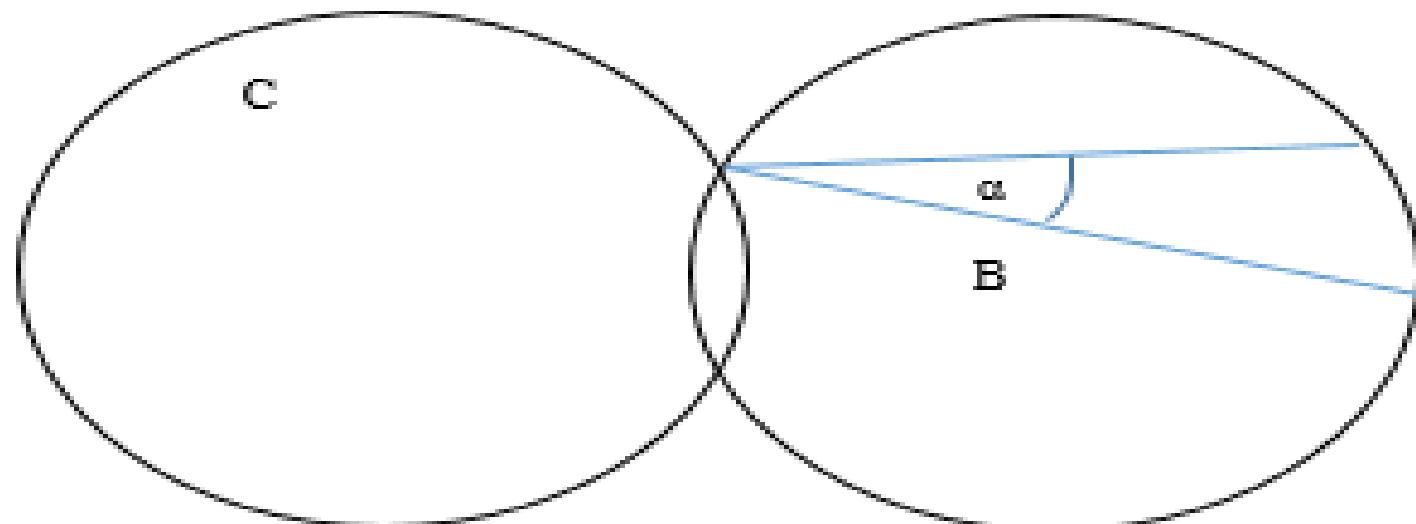
Hidroeléctricas

Geotérmicas

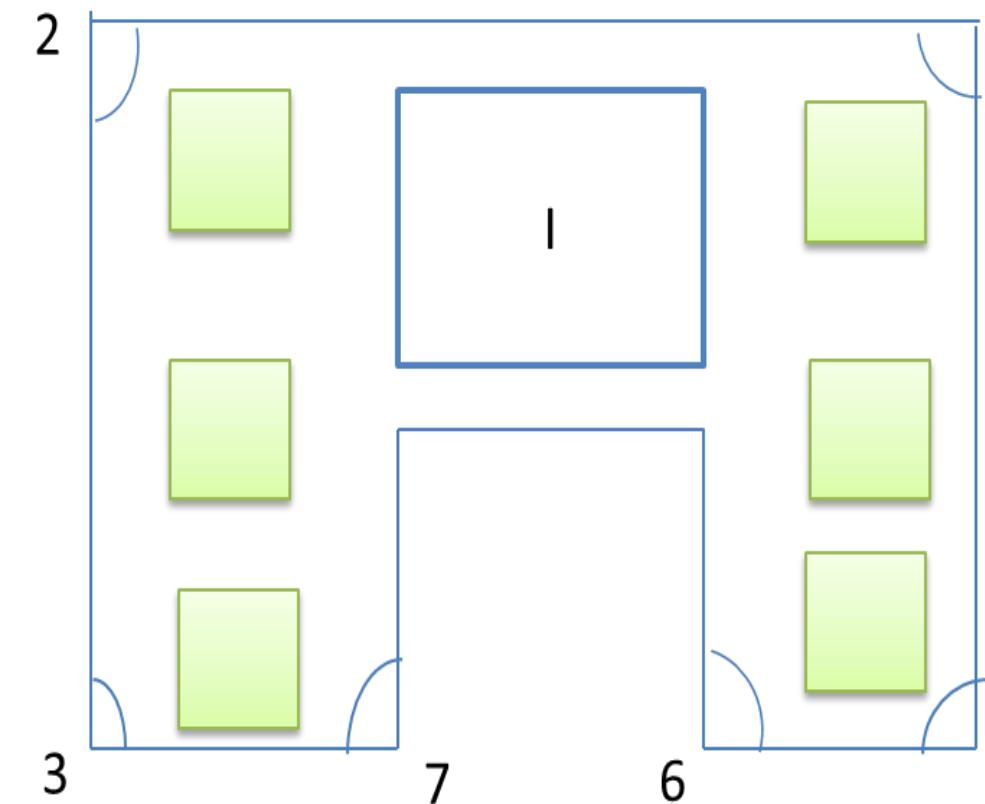
$$\left(\sqrt{\frac{3}{2}}, \frac{1}{2}\right)$$

Eólicas

Sin aristas



Desastres naturales internos



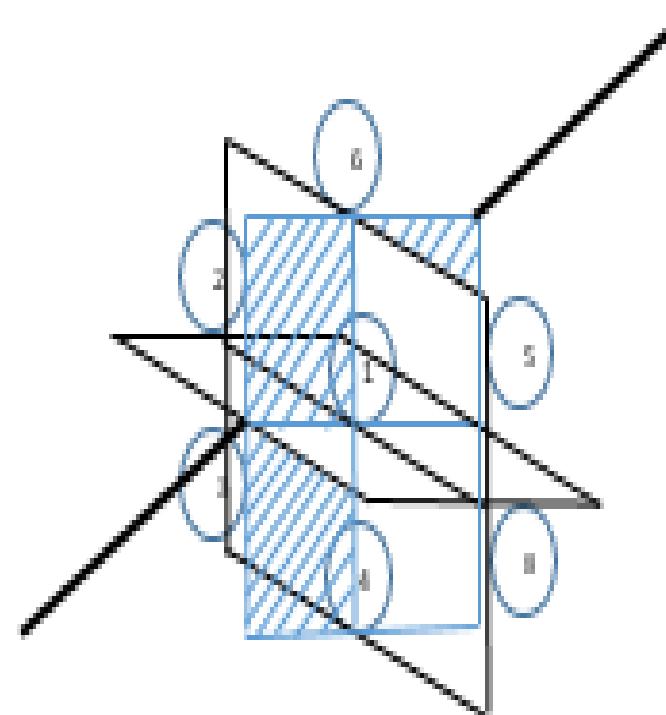
$$Rr = (F) \int_6^7 \frac{d}{dVI}$$

Los vacíos valen 1/2

Real = 6
Imagi = 7

Inundaciones

$$\nabla_D^2 = \frac{\partial^2}{\partial x^2} + \frac{\alpha_1 - 1}{x} \frac{\partial}{\partial x} + \frac{\partial^2}{\partial y^2} + \frac{\alpha_1 - 1}{y} \frac{\partial}{\partial y} + \frac{\partial^2}{\partial z^2} + \frac{\alpha_{3=1}}{z} \frac{\partial}{\partial z}$$

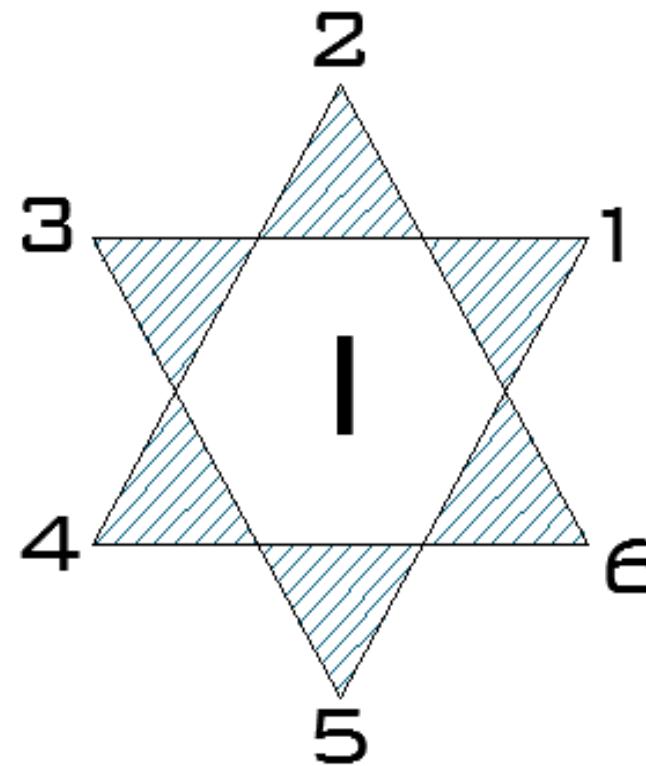


Sequías

$$\begin{aligned} \nabla^2 U(\rho) &= \frac{1}{\rho} \frac{\partial}{\partial \rho} \left(\rho \frac{\partial U}{\partial \rho} \right) \\ &= \left(\frac{\partial^2}{\partial \rho^2} + \frac{1}{\rho} \frac{\partial}{\partial \rho} \right) U(\rho) \end{aligned}$$

Estaño

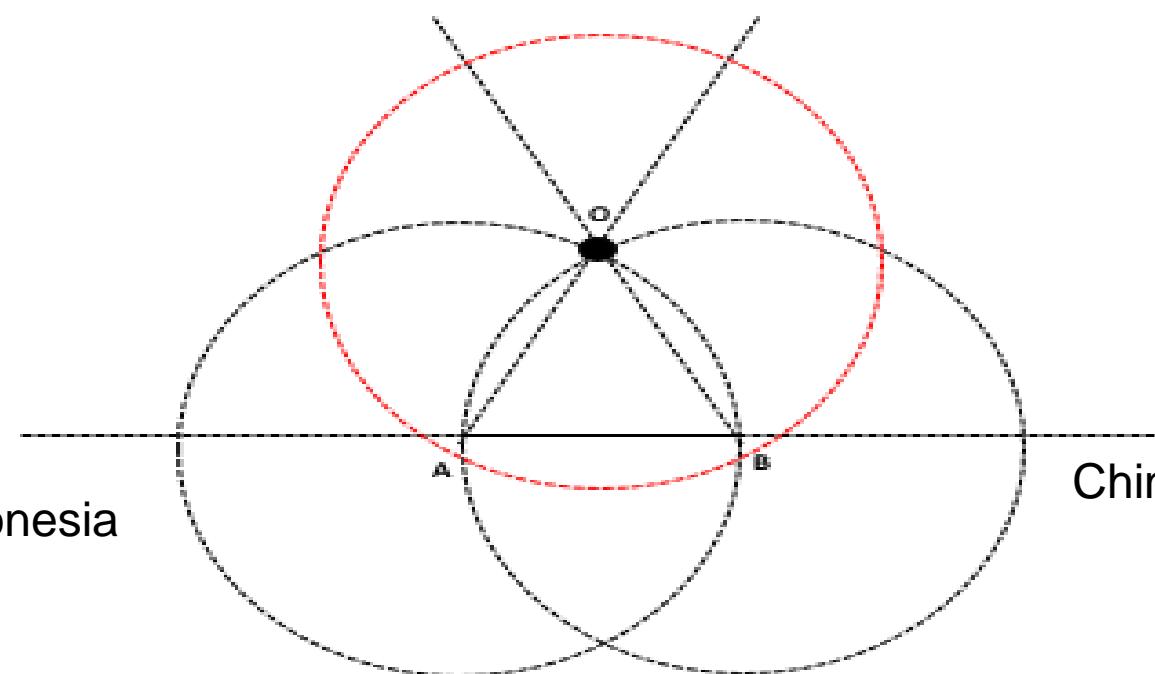
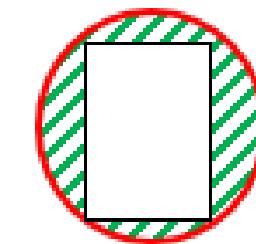
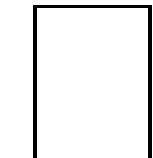
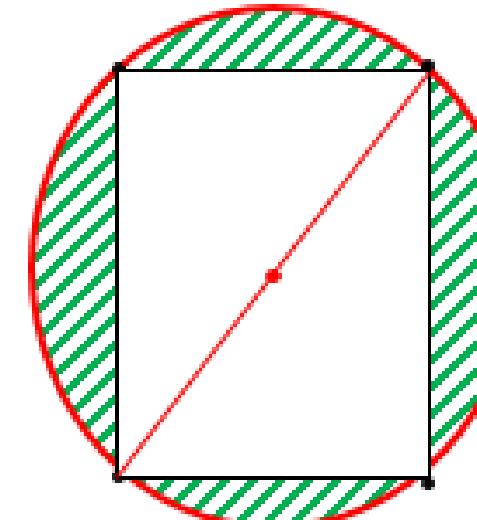
Fractal Caótico, tiene una parte imaginaria.



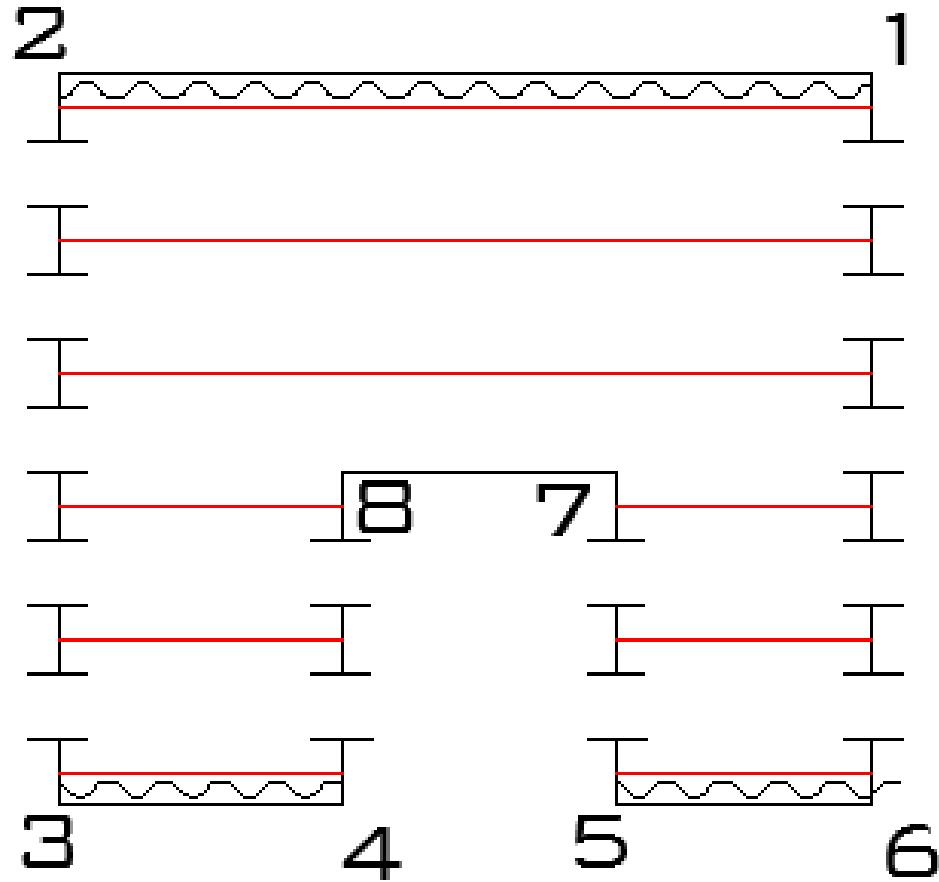
$$l = 1$$

$$R = 6$$

$$Rr = (f) \int_1^6 \frac{d}{d}$$



Fractal Complejo, tiene una parte imaginaria con interacción.

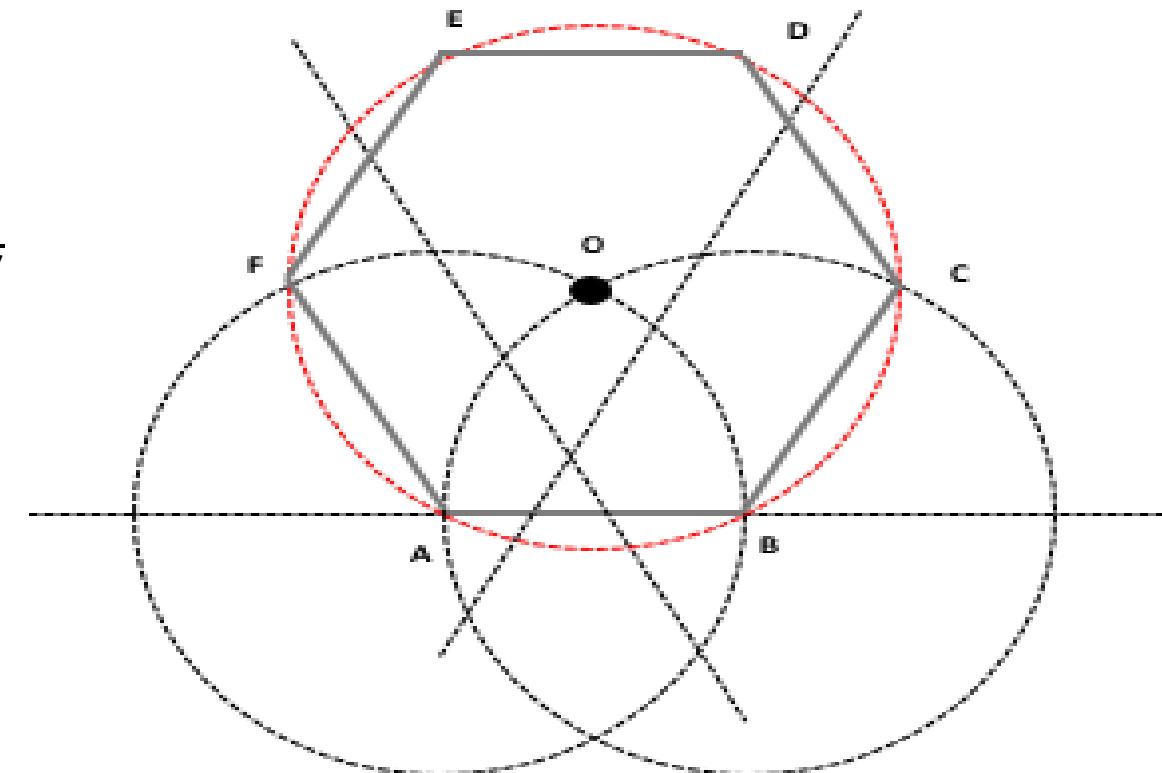


$$R = 8 \\ I = 3$$

* Imaginaria son todas las líneas no rotas

* Es fractal

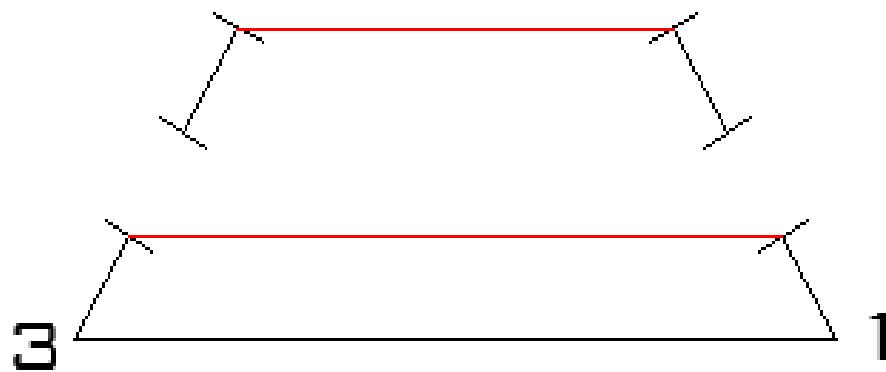
$$Rr = (f) \int_3^8 \frac{d}{d''}$$



Optimización de productos agropecuarios

Soya

2



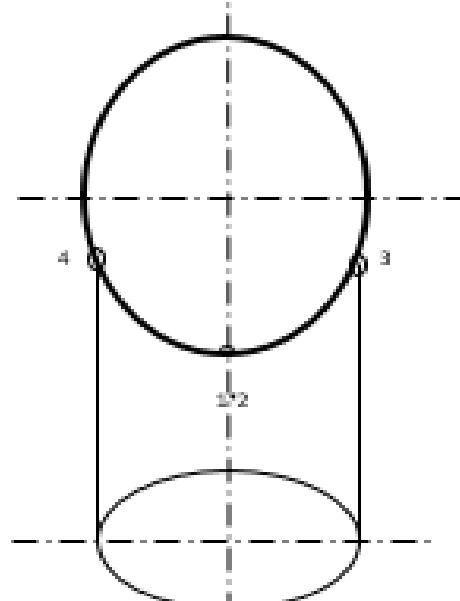
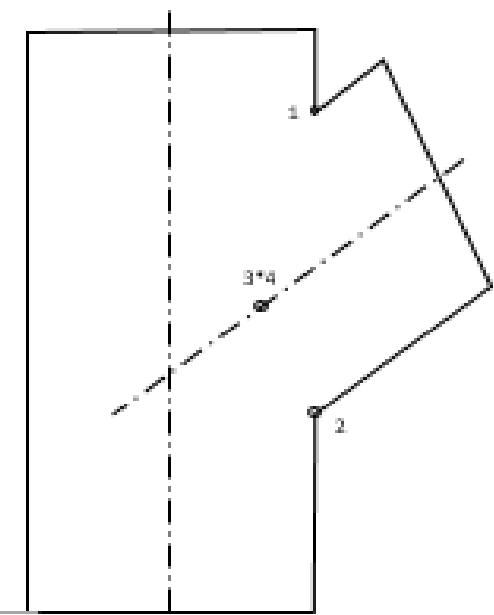
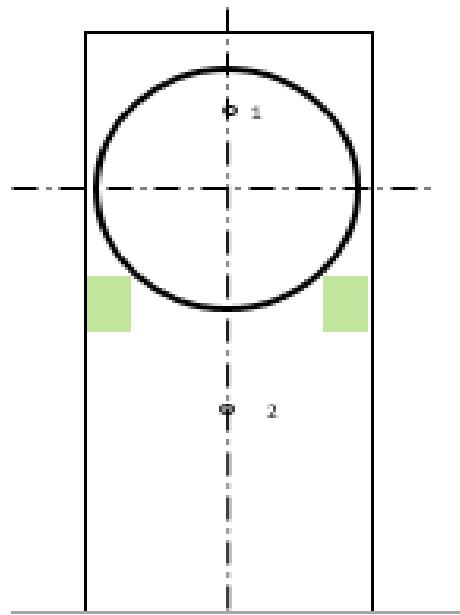
Azúcar y Arroz

R = 3

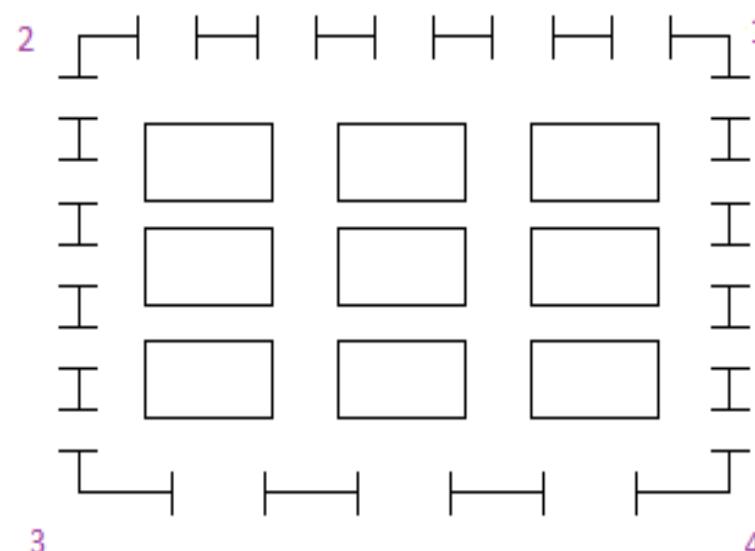
I = 2

$$Rr = (f) \int_2^3 \frac{d}{d''}$$

Ganadería



Perú 4,1 %



Brasil 29,8 %

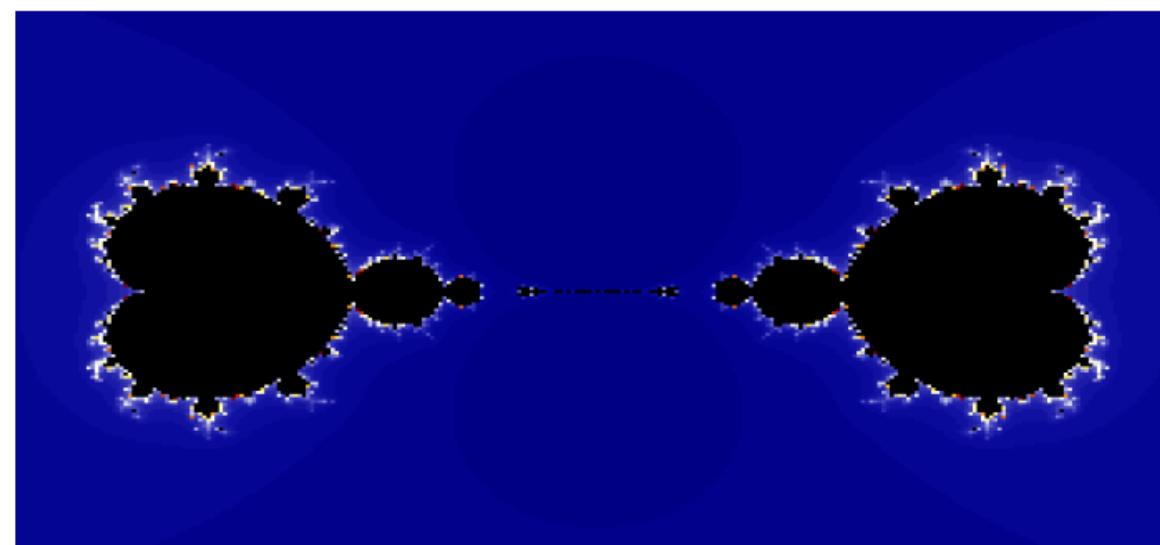
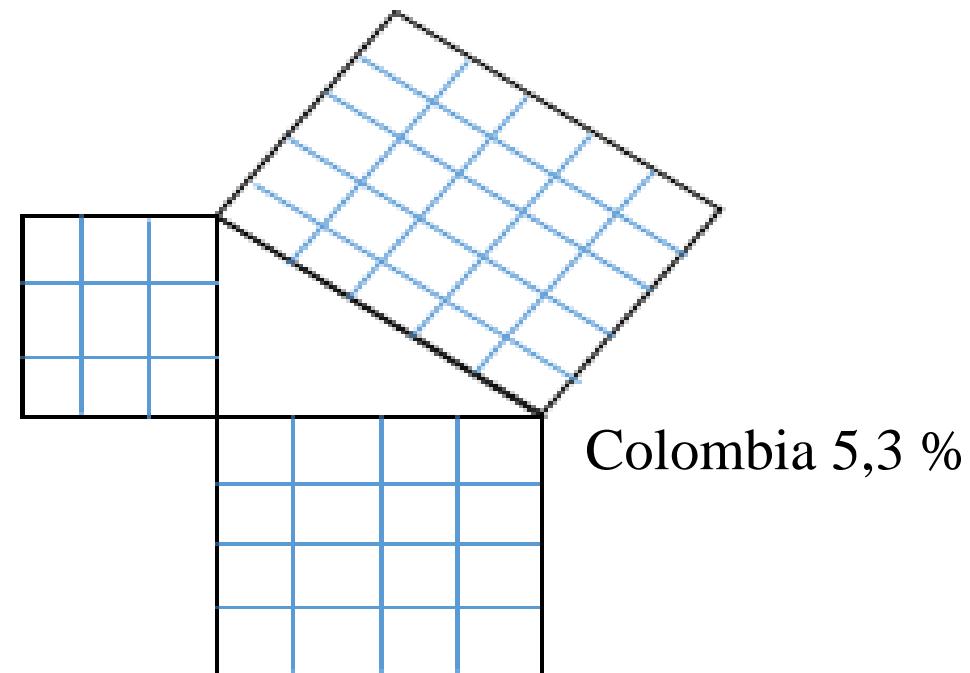
Argentina 19,7 %

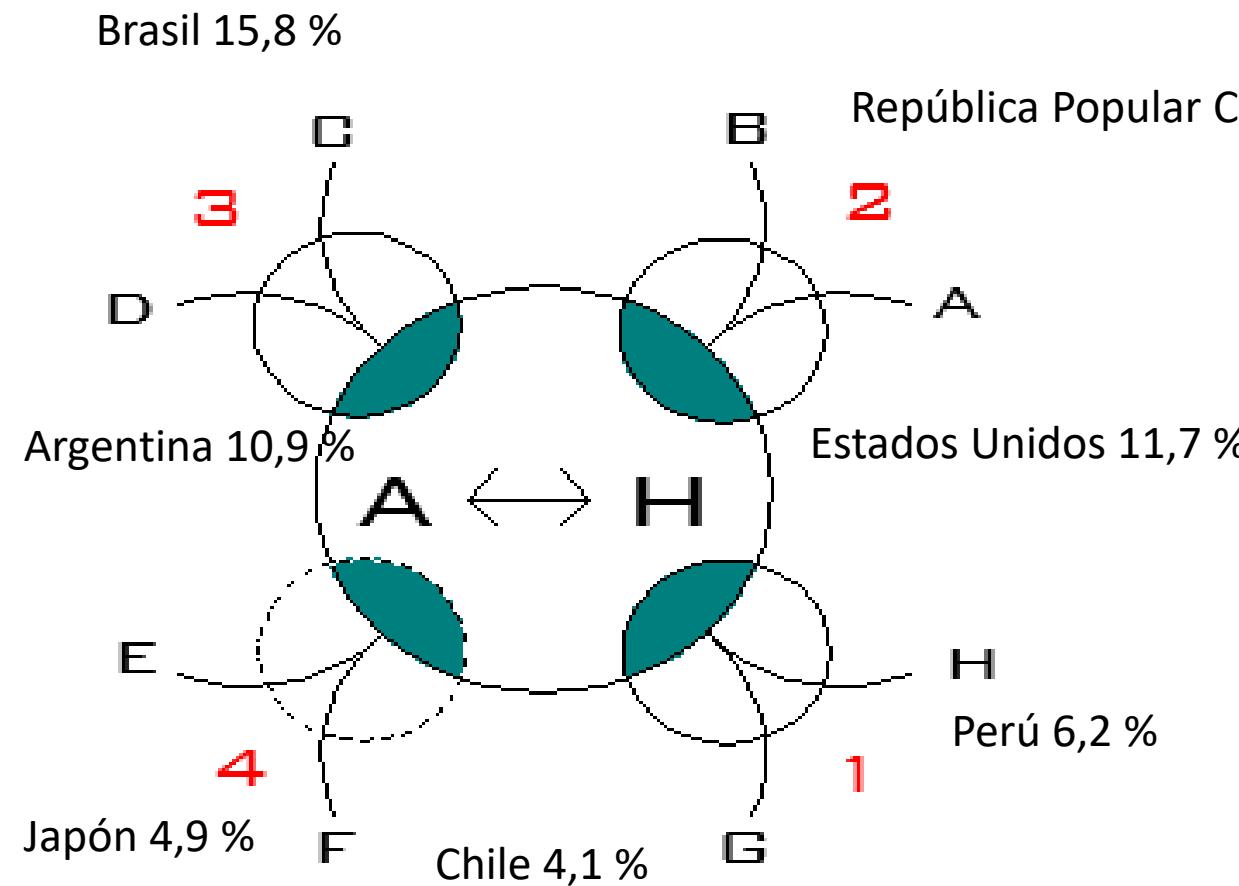
Estados Unidos 15,6 %

R = 4

I = a priori

$$Rr = \int^4 \frac{d}{d}$$





*Axioma.- Cuerpo que sale dentro de una figura o zona.

*Al momento de construir la ecuación se invierten los datos en la integral, el límite superior va el número imaginario y el límite Inferior va el número real. Se debe a la teoría del espejo.

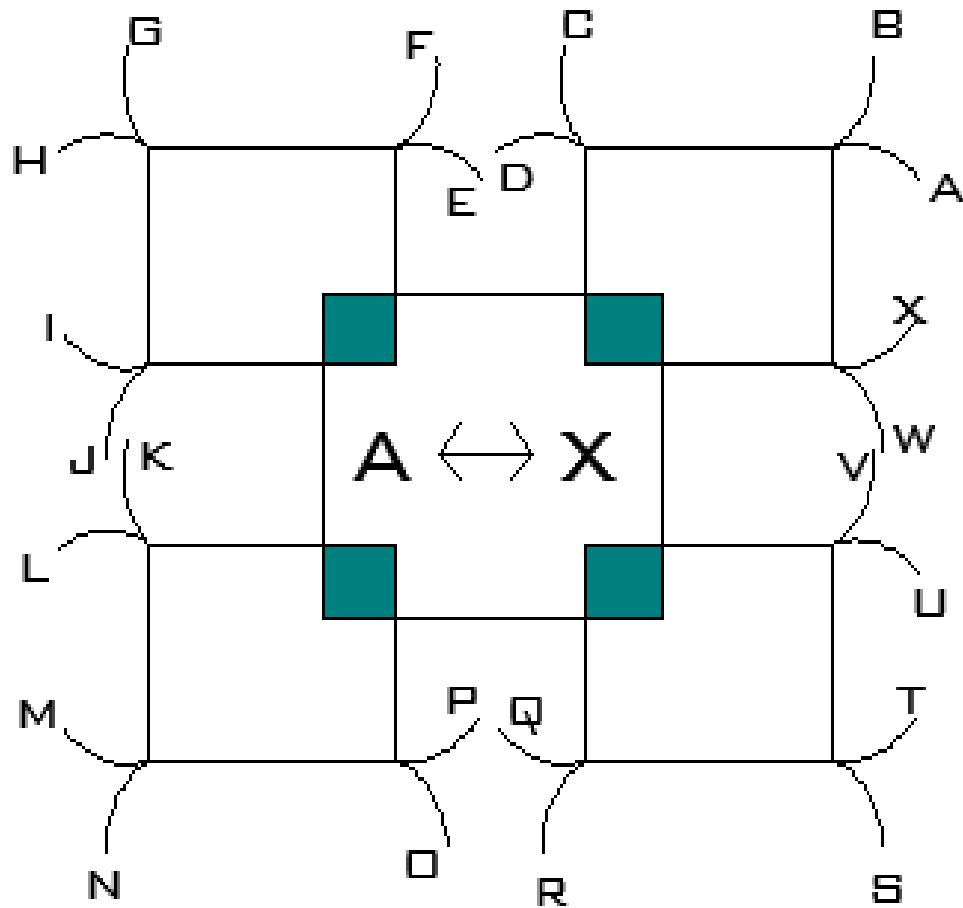
$$R=4$$

$$l=8$$

$$Rr = (f) \int_4^8 \frac{d}{d^{1/2}}$$

Fractal recursivo de orden 24

Sector primario: 13,5 %



Sector secundario: 38,6 %

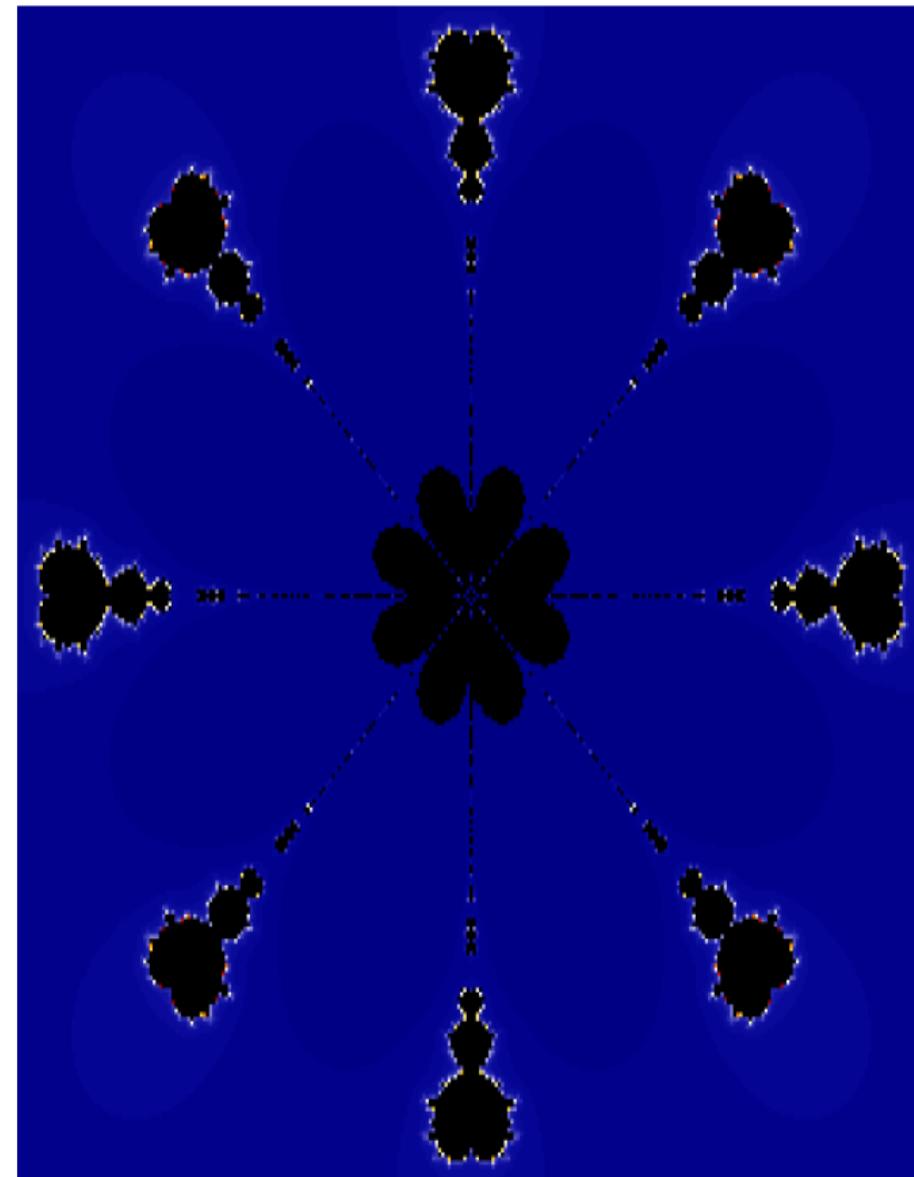
*Tiene dos aristas

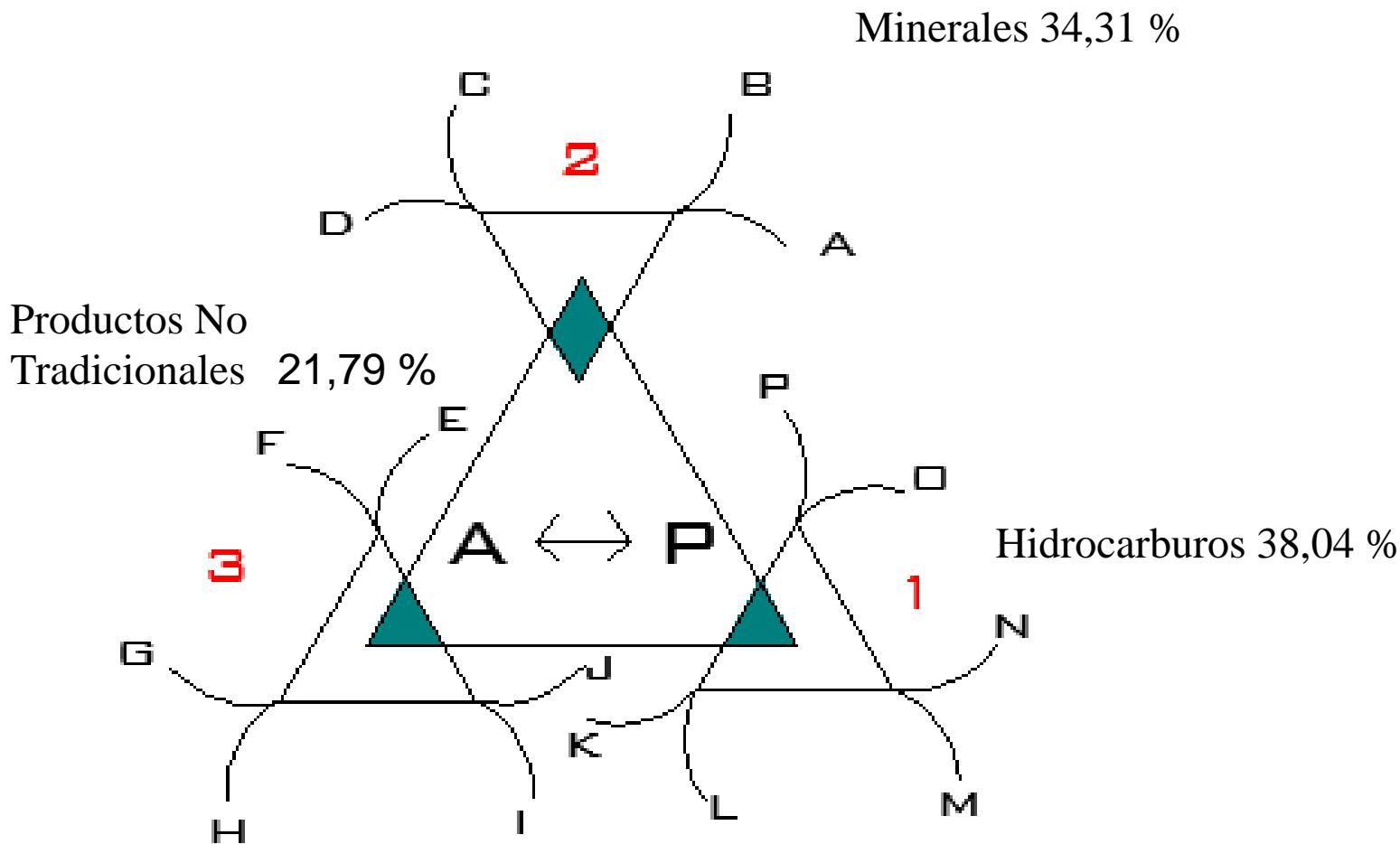
$$l=24$$

$$R=4$$

Sector terciario: 53,2 %

$$Rr = (f) \int_4^{24} \frac{d}{d^{1/2}}$$





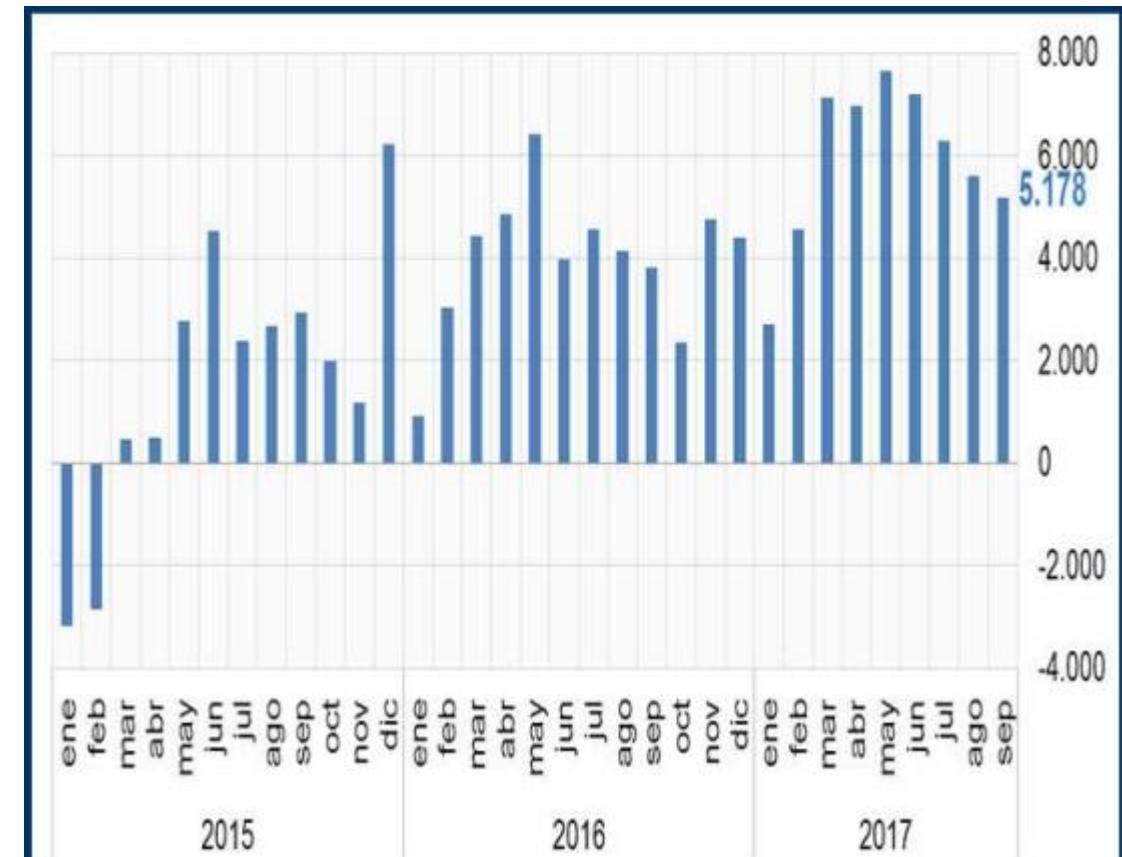
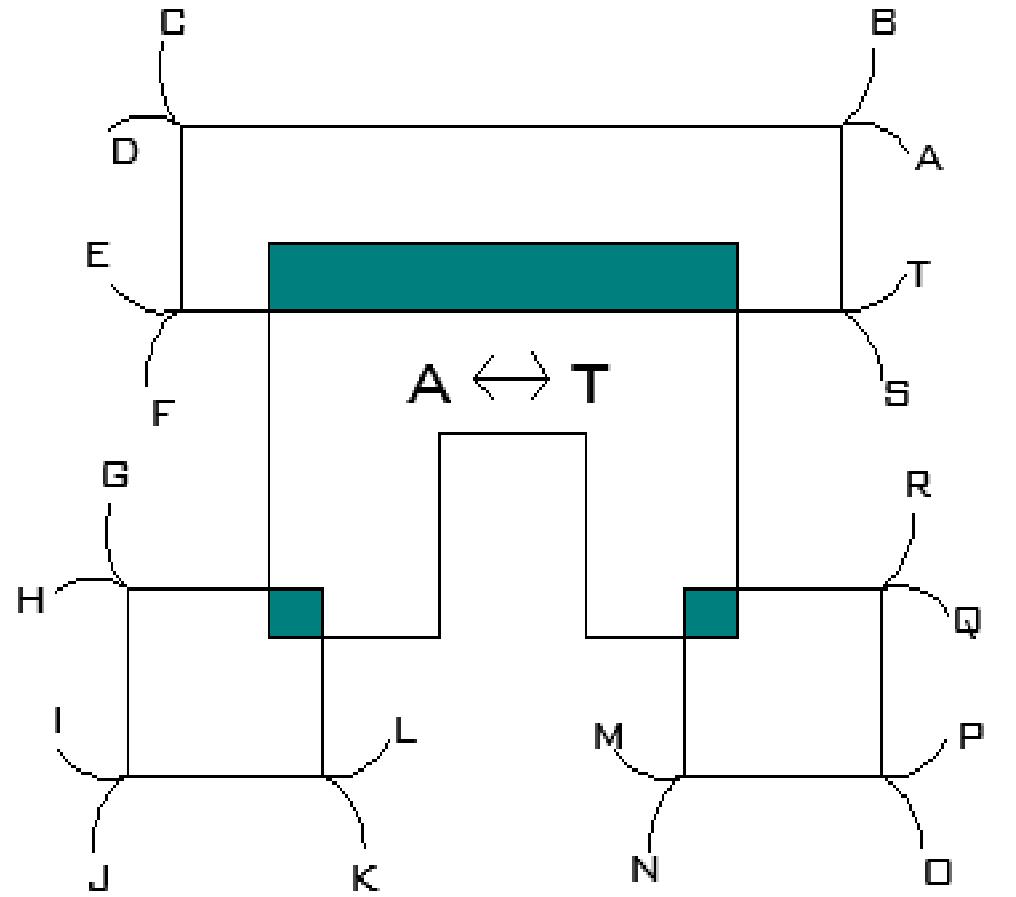
$$I = 16$$

$$R = 3$$

$$Rr = (f) \int_3^{16} \frac{d}{d^{1/2}}$$

Balanza comercial (En millones de dólares)

$$Rr = (f) \int_3^{20} \frac{d}{d^{1/2}}$$



Integral iterada (conjunto de integrales subsecuentes)

$$\lim Rr = \{F\} = \int_3^7 \frac{d}{d^{IV}} + \int_4^5 \frac{d}{d^{IV}} + \int \frac{d}{d} + \int_6^7 \frac{d}{d^{IV}} + \int_4^6 \frac{d}{d} + \int_3^8 \frac{d}{d^{III}} + \int_4^4 \frac{d}{d} + \int_2^3 \frac{d}{d^{II}} + \int_4^8 \frac{d}{d^{I/2}} +$$

$$\int_3^{16} \frac{d}{d^{1/2}} + \int_4^{24} \frac{d}{d^{1/2}} + \int_5^{20} \frac{d}{d^{1/2}} + \xi^2$$

EVOLUCION DEL SALDO DE LA DEUDA EXTERNA PÚBLICA DE MEDIANO Y LARGO PLAZO
(En millones de dólares)

GESTION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
FMI	277.4	248.1	264.2	246.7	220.2	207.0	194.6	276.5	306.0	243.8	14.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
MULTILATERAL	2,724.7	2,762.5	2,759.4	2,826.7	2,857.38	3,054.3	3,442.7	4,042.1	4,356.2	4,276.2	2,820.0	1709.26	1,819.9	1,993.3	2,287.9	2,620.8	3,040.9	3,459.8	3,901.4	4,651.6
CAF	282.1	245.7	198.2	208.7	255.4	420.7	577.4	740.6	836.9	871.2	843.6	856.1	947.0	1,020.0	1,168.5	1,316.6	1,511.0	1,628.8	1,772.3	1,900.8
BID	1,435.3	1,446.8	1,381.2	1,396.8	1,392.8	1,373.7	1,450.2	1,626.5	1,658.2	1,622.8	1,621.2	459.3	460.9	519.4	629.4	764.2	936.0	1,179.4	1,458.4	1,768.5
BANCO MUNDIAL	892.0	956.4	1,067.6	1,105.9	1,096.6	1,146.9	1,323.6	1,571.4	1,748.8	1,666.8	233.4	261.2	280.1	315.2	355.1	393.9	443.0	498.6	498.6	735.4
OTROS	115.3	113.6	112.3	115.2	112.6	112.9	91.5	103.6	112.3	115.4	121.8	132.7	131.9	138.6	134.9	146.1	150.9	153.0	171.9	246.9
BILATERAL	1,621.0	1,503.1	1,607.3	1,483.8	1371.75	1,227.3	756.9	820.7	383.5	421.6	413.6	498.6	622.8	607.4	602.8	871.1	654.9	802.0	835.1	689.2
REP.POPULAR CHINA	21.5	24.9	24.6	24.1	23.3	21.4	19.5	16.3	14.0	24.4	38.6	75.4	79.5	79.5	82.2	170.8	291.4	457.2	535.7	530.2
VENEZUELA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	5.9	32.6	83.7	228.5	303.4	309.5	416.9	159.8	154.5	125.3	0.8
BRASIL	21.9	21.9	21.9	21.9	21.9	33.5	56.2	73.5	87.4	121.5	133.4	126.7	114.0	101.4	95.0	172.0	93.0	80.3	70.9	56.0
ALEMANIA	426.9	394.2	410.3	356.2	325.4	306.1	6.9	9.5	39.1	34.0	45.8	51.3	56.5	58.4	54.7	54.1	55.5	58.5	51.9	45.7
ESPAÑA	122.4	122.1	142.3	139.4	142.3	137.8	134.9	130.9	142.8	139.3	129.2	119.7	106.5	19.3	16.4	16.2	15.7	15.4	14.1	13.1
FRANCIA	63.4	59.6	61.0	45.2	40.7	37.9	16.1	17.2	17.2	13.3	12.8	12.5	10.6	9.1	10.0	8.8	7.9	7.2	5.4	4.1
EEUU	55.7	60.2	71.2	61.0	60.1	59.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
REINO UNIDO	28.9	28.7	28.8	18.6	18.1	17.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BELGICA	150.0	130.9	126.3	62.4	57.7	54.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
JAPON	526.4	468.7	528.5	587.3	523.4	464.1	513.5	567.6	71.6	63.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
OTROS	203.9	192.0	192.4	167.7	159.0	94.5	9.9	5.6	10.8	20.2	21.2	29.4	27.1	36.3	35.1	32.3	31.6	29.0	31.8	39.3
PRIVADO	20.1	17.8	28.5	16.3	11.2	8.4	5.5	2.8	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	500.0	1,000.0	1,000.0	1,000.0
SALDO	4,643.2	4,531.5	4,659.3	4,573.4	4,460.5	4,497.0	4,399.8	5,142.2	5,046.0	4,941.7	3,248.1	2,207.9	2,442.8	2,600.6	2,890.7	3,491.9	4,195.82	5,261.8	5,736.2	6,340.8

Actualizado al: 14JUN2016

$$\lim Rr = \{F\} = \frac{\log 7 + \log 3}{\frac{1}{3}} + \frac{\log 5 + \ln 4}{\frac{1}{4}} + \frac{\log + \ln 6}{\frac{1}{6}} + \frac{\log 6 + \ln}{\frac{1}{\infty}} + \frac{\log 8 + \ln 3}{\frac{1}{8}} + \frac{\log 4 + \ln}{\frac{1}{4}} + \frac{\log 3 + \ln + 2}{\frac{1}{3}} + \frac{\log 8 + \ln 4}{\frac{1}{8}} + \frac{\log 16 + \ln 3}{\frac{1}{16}} + \frac{\log 24 + \ln 4}{\frac{1}{24}} + \frac{\log 20 + \ln 3}{\frac{1}{20}} +$$

$$\frac{\lim}{d} (\xi^2)$$

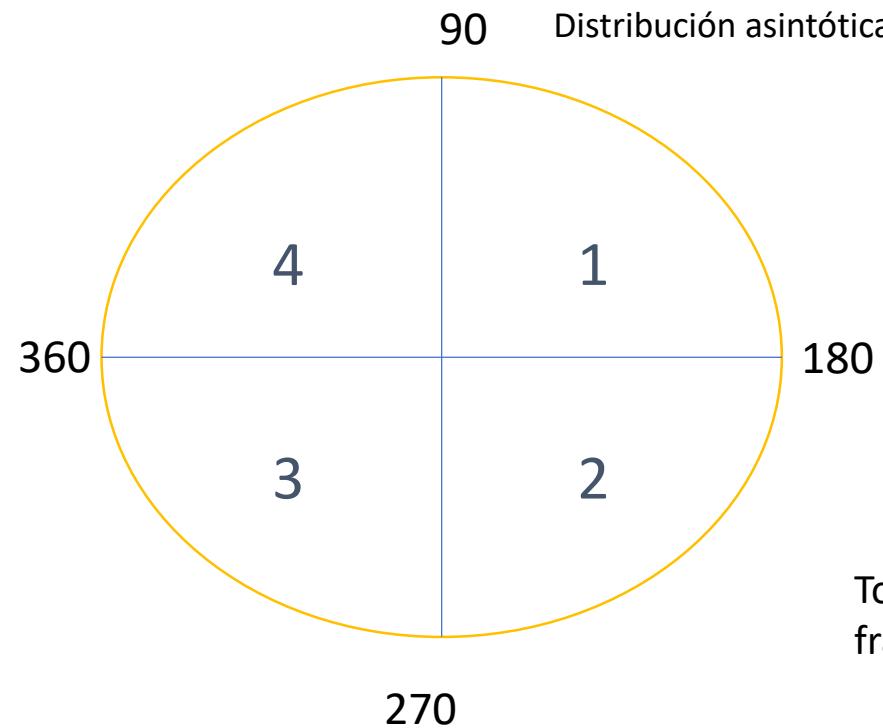
Error de Euler

FECHA DE LA COTIZACIÓN: Viernes 13 de Octubre de 2017

Hamiltoniano

$$Rr = \frac{\log(7,5,7,6,8,4,3,8,16,24,20)}{\ln(3,4,6,1,3,1,2,4,3,4,3)} + (\xi^2)$$

$$\frac{d^{x_1}}{\int_{\alpha}^{1+n!} \frac{3+4+6}{3+4+3+8+16+24+20} \text{d}x_1}$$



Todo lo que sea mayor a 4 es
fractal (∞)

PAÍS	UNIDAD MONETARIA	TIPOS DE CAMBIO EN Bs. POR UNIDAD DE MONEDA EXTRANJERA
ARGENTINA	PESO	0,39382
AUSTRALIA	DÓLAR	5,36587
BRASIL	REAL	2,16199
CANADA	DÓLAR	5,50164
CHILE	PESO	0,01099
COLOMBIA	PESO	0,00233
COREA DEL SUR	WON	0,00605
DINAMARCA	CORONA	1,09053
ECUADOR	DÓLAR	6,86000
ESTADOS UNIDOS	DÓLAR VENTA	6,96000
ESTADOS UNIDOS	DÓLAR COMPRA	6,86000
HONG KONG	DÓLAR	0,87850
INDIA	RUPIA	0,10540
JAPÓN	YEN	0,06110
MÉXICO	PESO	0,36393

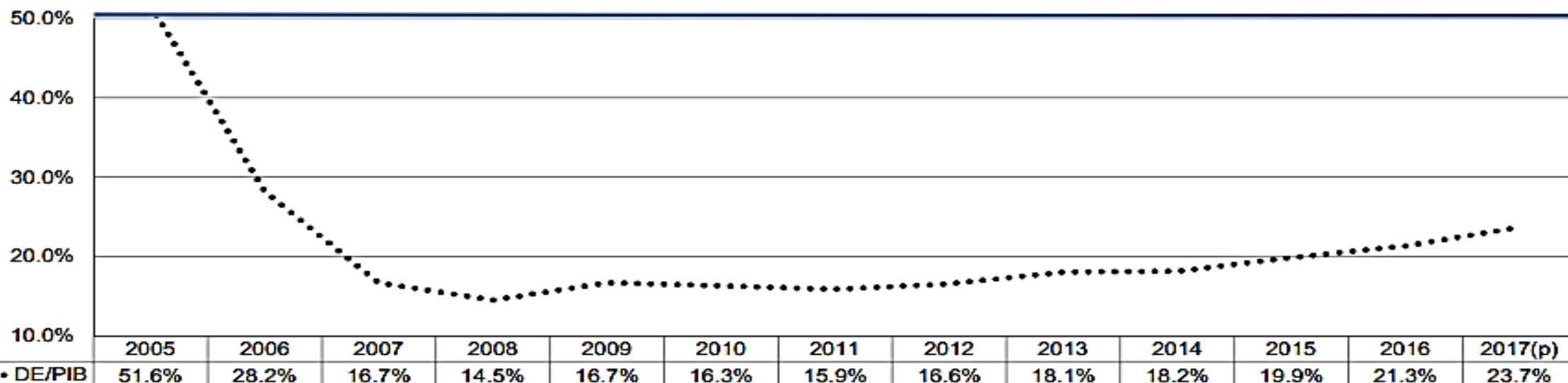
Rr

$$= \left\{ \frac{\alpha + \alpha + \alpha + \alpha + \alpha + \alpha^{n+4} + \alpha^{n+3} + \alpha + \alpha + \alpha + \alpha}{L^{n+3} + L^{n+4} + L^{n+1} + \alpha^{n+1} + \alpha^{n+4} + \alpha^{n+3} + \alpha^{n+4} + \alpha^{n+3}} \right\}$$

$$- \int_{\frac{1}{\alpha} \alpha^{n+3} \alpha^{n+4} \alpha + \alpha^{n+3} + \alpha^{n+4} + \alpha^{n+3} + \alpha + \alpha + \alpha + \alpha}^{\frac{l+nl}{lim \frac{1}{2}}} + \xi^2!$$

$$Rr = \left[\frac{\lim(9)\alpha}{\frac{1}{\alpha}} \right] - \left[\frac{\log \frac{1}{\alpha}}{\lim(\parallel)} \right] + \frac{\log \frac{1+n}{\alpha}}{\left[\frac{\alpha^{(3-4-2)}}{\ln \frac{1}{\alpha}} \right]} + \log \frac{1}{\alpha} + \xi^2$$

**Indicador de Solvencia
SALDO DEUDA/PIB (*)
(En porcentaje)**



(p) Preliminar, PIB estimado 2017.

$$Rr = \frac{\log 9}{\left[\frac{1}{x} \right]} + \frac{\ln 3 + \ln 4 + \ln 2}{\left[\frac{1}{-x} \right]} - \frac{\log \frac{1}{II}}{\ln 11} + \log \frac{1+11}{\frac{1}{11}} + \log \frac{1}{11} + \xi^2$$

$$Rr = \frac{18.78}{\frac{0.5}{(0.5)^2}} + \xi^2$$

$$Rr = \frac{0.95}{0.5} + \frac{1.09 + 1.38 + 1.06}{(1 - 0.5)} - |\widehat{\text{anti log}}| + \frac{1.08}{0.11} + |\widehat{\text{anti log}}| + \xi^2$$

$$Rr = \frac{37.55}{1} + \xi^2$$

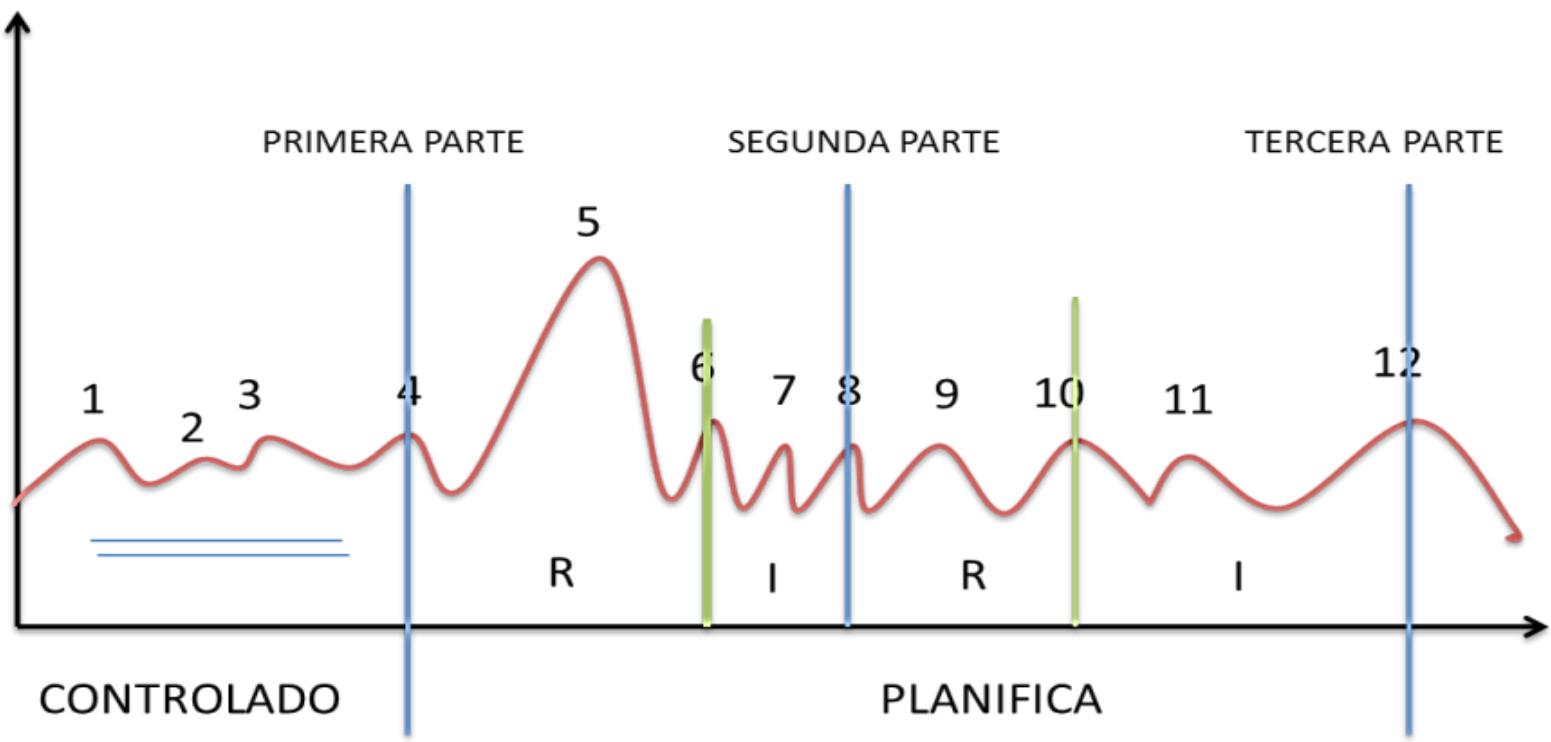
$$Rr = 1.9 + \frac{3.53}{0.5} - \frac{d}{d''} + 9.82 + \xi^2$$

$$Rr = \frac{37.55}{0.618}$$

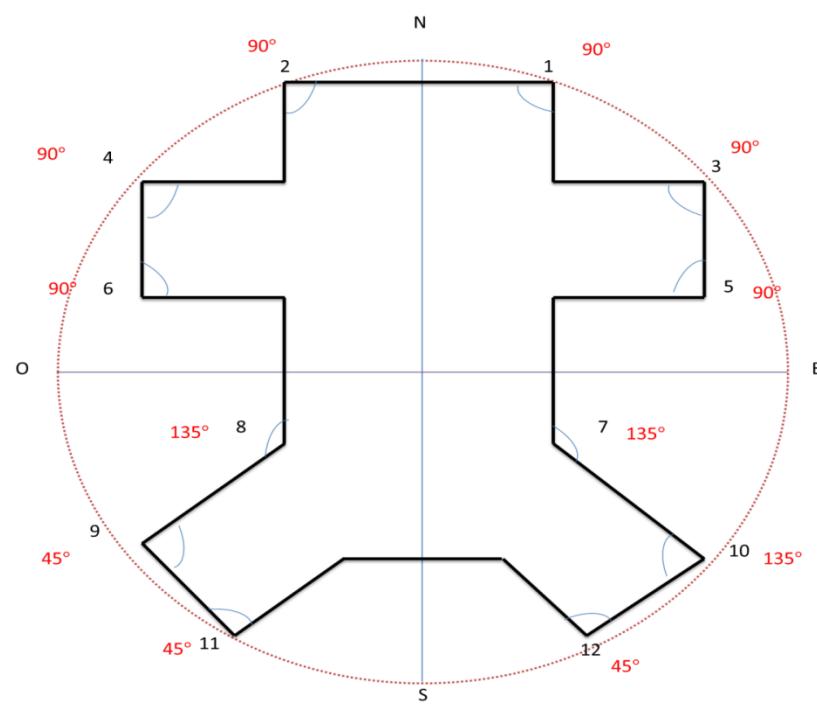
$$Rr = \frac{1.9 + 7.06 + 9.82}{\frac{d}{d^\nu}} + \xi^2$$

$$Rr = \frac{60.76 * 100}{100} = 60.76\%$$

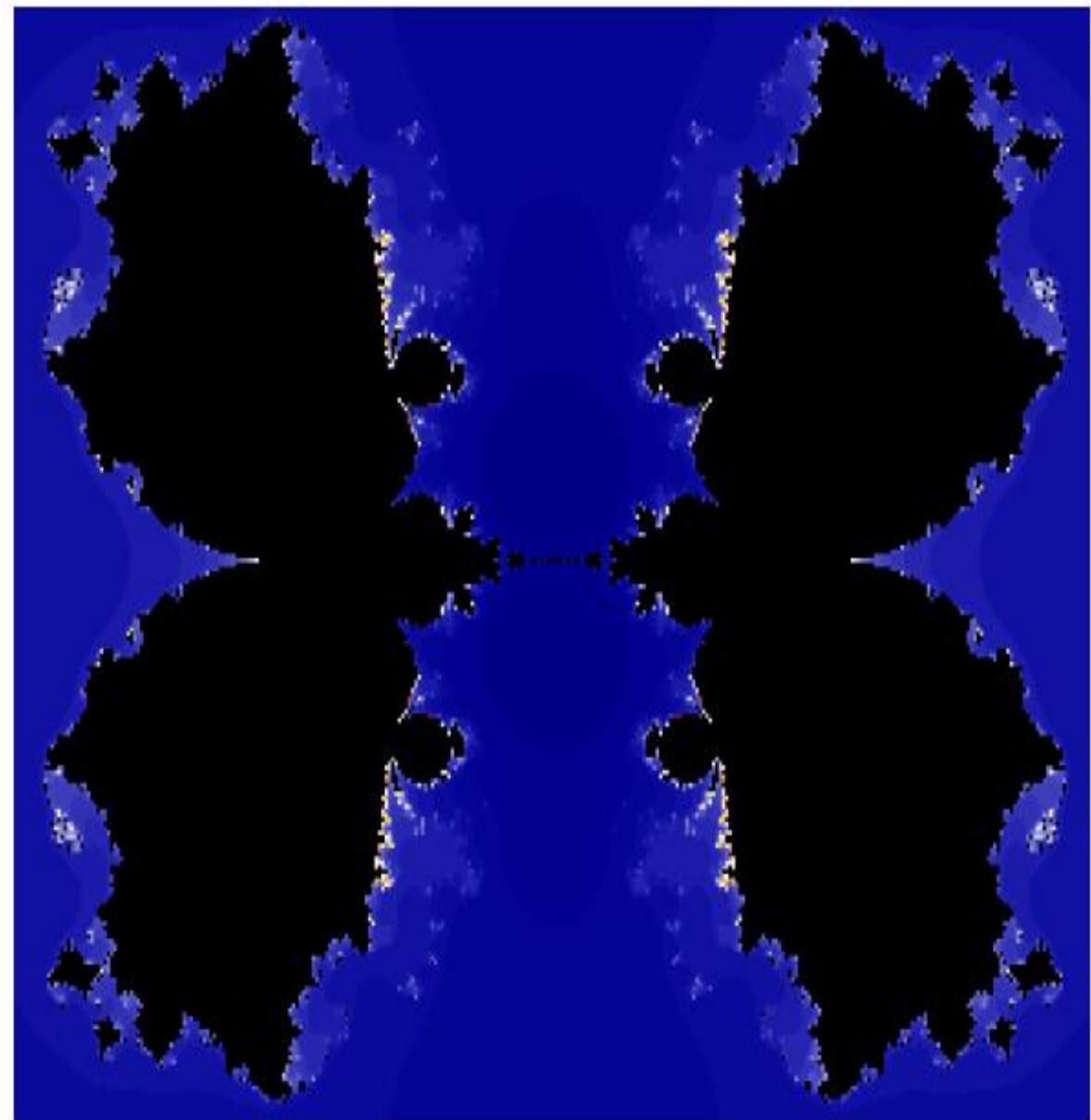
$$M = 60.76$$



Red fractal



$$\int \left[\frac{1 \rightarrow 90^\circ}{\lambda - E(N)} \right] + \left[\frac{2 \rightarrow 90^\circ}{\lambda - N(0)} \right] + \left[\frac{3 \rightarrow 90^\circ}{\lambda - E(N)} \right] + \left[\frac{4 \rightarrow 90^\circ}{\lambda - N(0)} \right] + \left[\frac{5 \rightarrow 90^\circ}{\lambda - E(N)} \right] \\ + \left[\frac{6 \rightarrow 90^\circ}{\lambda - N(0)} \right] + \left[\frac{7 \rightarrow 135^\circ}{\lambda - S(E)} \right] + \left[\frac{8 \rightarrow 135^\circ}{\lambda - 0(S)} \right] + \left[\frac{9 \rightarrow 90^\circ}{\lambda - 0(S)} \right] \\ + \left[\frac{10 \rightarrow 45^\circ}{\lambda - S(E)} \right] + \left[\frac{11 \rightarrow 45^\circ}{\lambda - 0(S)} \right] + \left[\frac{12 \rightarrow 45^\circ}{\lambda - S(E)} \right] + \frac{d}{d} \propto$$



$$f = \left\{ \frac{1 \leftrightarrow (90^\circ)^{IV}}{\lambda - \left[\frac{E^m}{6} \right]} + \frac{7 \leftrightarrow (135^\circ)^{II}}{\left[\frac{E}{0(2)} \right]} + \frac{9 \leftrightarrow (45^\circ)^{IV}}{\lambda - \left[\frac{0^n}{E^n(4)} \right]} \right\} \frac{d}{d \propto}$$

Escala de Fourier con bifurcación de Fresnel

$$f = \frac{\frac{\rightarrow 1}{d(1)} \frac{\rightarrow 7}{d(1)} \frac{\rightarrow 9}{d(1)}}{1/\lambda} \left[\frac{E^{IV} - E^{II}(4) + 0^{II}}{12(0)} \right] + \frac{d}{d \propto}$$

EVOLUCIÓN DE LA DEUDA EXTERNA PÚBLICA DE MEDIANO Y LARGO PLAZO

PERÍODO 2007-2017

(En millones de USD)

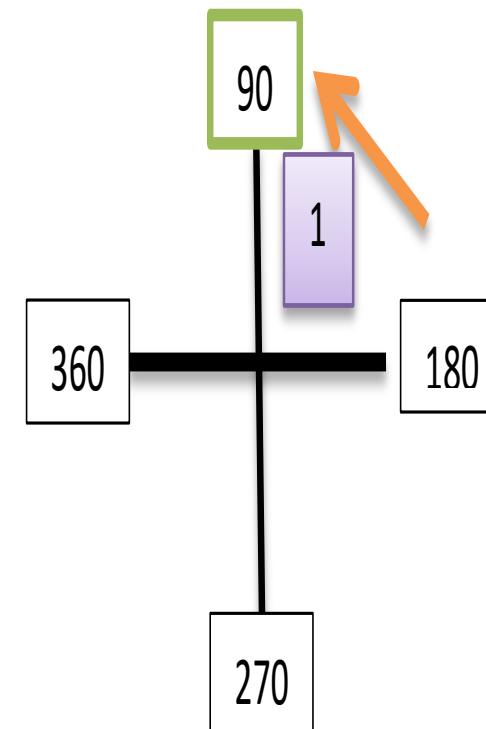
GESTION	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	30/06/2017 (p)
SALDO	2.207,9	2.442,8	2.918,4	3.235,0	3.837,4	4.524,6	5.583,8	6.035,7	6.612,7	7.267,7	8.718,5

FUENTE: BCB

ELABORACION: Gerencia de Operaciones Internacionales

(p) Preliminar

$$f = \frac{\frac{1 \rightarrow 7 \rightarrow 9}{d'''(3)}}{1/\lambda} \left[\frac{4(E^{II} + 0^{II})}{\frac{12}{-0}} \right] + \frac{d}{d \propto}$$



$$f = \frac{1 \rightarrow 7 \rightarrow 9}{\frac{3}{-d'''}} \left[\frac{4(E \rightarrow 0)^{IV}}{\frac{12}{-0}} \right] + \frac{d}{d\alpha}$$

$$f = \frac{\left[\left(\frac{1 \rightarrow 7 \rightarrow 9}{3(4) + \left[\frac{E \rightarrow 0}{-0} \right]} \right) \frac{IV}{\lambda} \cdot |d'''| \right]}{-12} + \frac{d}{d\alpha}$$

$$f = \frac{1 \rightarrow 7 \rightarrow 9}{\frac{(12) + E}{-12}} \frac{\frac{IV}{1}(d''')}{\lambda} + \frac{d}{d\alpha}$$

$$f = \frac{1 + 1 + 1}{12 + E + 12} \left(\frac{IV}{\lambda} \right) \frac{(3)}{d} + \frac{d}{d\alpha}$$

$$\frac{1}{\lambda} = \frac{1}{\lambda + 1} + \left[\frac{\lambda - 1}{\lambda + 1} \right]^\lambda$$

$$\lambda = \left[\frac{\lambda + 1}{\lambda - 1} \right]^{\lambda - 1}$$

Agroindustria
Cooperativas
Bancos
Eléctricas
Construcción
Industriales
Patrimonio Autónomo
Petroleras
Seguros
Servicios
Servicios Financieros
Transporte
Municipal

$$\frac{1}{\lambda} = \frac{1}{1 + \lambda} \left[\frac{1 - \lambda}{1 + \lambda} \right]^{\lambda - 1}$$

$$\lambda \left[\frac{\lambda - 1}{\lambda + 1} \right] \lambda + 1$$

$$\frac{1}{\lambda} = \frac{1}{1 + \lambda} \left[\frac{\lambda + 1}{\lambda - 1} \right]^{\lambda \pm 1}$$

$$\lambda = \left[\frac{\lambda'''}{1} \right] \left[\frac{\lambda + \lambda -}{\lambda -} \right] = \left[\frac{\lambda'''}{\lambda \pm \lambda -} \right] \frac{-\lambda'''}{\lambda}$$

$$\frac{1}{\lambda} = \frac{1}{\lambda + 1} \left[\frac{\lambda + 1}{\lambda - 1} \right]$$

$$\lambda = \frac{\lambda^{\lambda - 1}}{\lambda^{\lambda + 1}}$$

$$\lambda = \frac{\lambda''}{\lambda - 1 + \lambda + 1}$$

$$\lambda = \frac{\lambda''}{\lambda - 1} = \frac{\lambda''}{\lambda \pm 1}$$

$$f = \frac{3}{24(E)} \left(\frac{IV}{\frac{1}{\lambda}} \right) \frac{3}{d} + \frac{d}{d\alpha}$$

$$f = \frac{3 - 24}{E} + \left(\frac{IV}{\frac{1}{\lambda}} \right) \frac{3}{d} + \frac{d}{d\alpha}$$

$$f = \frac{-21 - 3 \left(\frac{1}{\lambda} \right)^{IV}}{E} \cdot \frac{d}{d\alpha}$$

$$f = \frac{-24}{E} \cdot \left(\frac{1}{\lambda d} \right)^{\frac{IV}{d}} \cdot \frac{d}{d\alpha}$$

$$f = \left(\frac{-24}{E} \right) \frac{d}{\lambda d} \left(\frac{1}{[-1]} \right) \cdot \frac{d}{d\alpha}$$

$$f = \frac{d - d}{\lambda} [E(-24)]$$

$$f = \left[\frac{\lambda}{E} \right] \cdot \frac{(24)^{IV}}{d} \cdot d\alpha$$

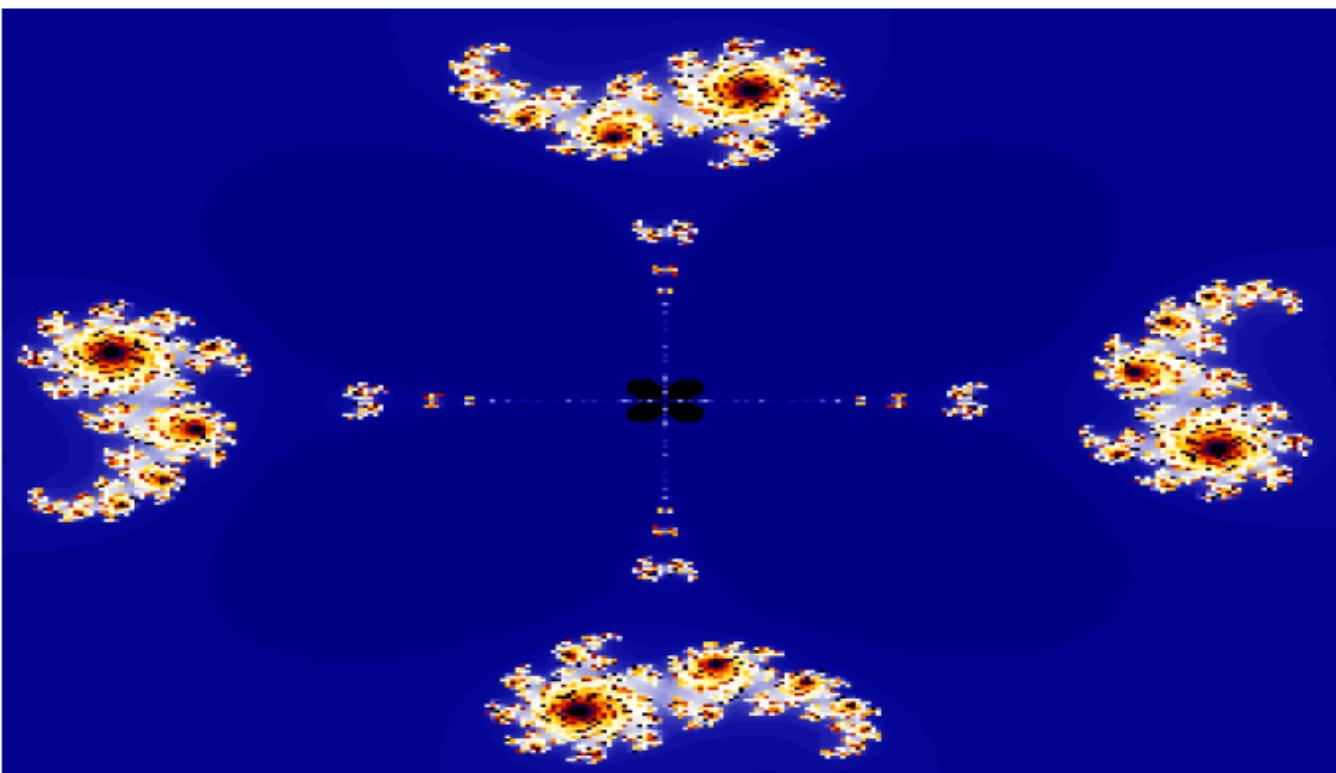
$$f = \frac{\lambda(E)}{24} \frac{d}{-24} \cdot d\alpha$$

$$f = \frac{-\lambda}{E} \cdot \frac{d}{d\alpha}$$

$$f = \frac{E}{-\lambda} \cdot \frac{d}{d\alpha}$$

$$f = \left[\frac{E}{-\lambda} \right]^{d/\alpha}$$

$$f = (E \cdot \lambda)^{1/2} d\alpha$$



Referencias

- Bhalekar, S. (2017).Synchronization of non-identical fractional order hyperchaotic systems using active control.*World Journal of Modelling and Simulation*, 10(1), 60-68.
- Chettiparamb, A. (2017). Complexity theory and planning: Examining ‘fractals’ for organising policy domains in planning practice. *Planning Theory*, 13(1), 5-25.
- Chugh, R., &Ashish, A. (2017). Fractals Generated by Various Iterative Procedures-A Survey.
- Deviha, V. S., RENGARAJAN, P., &Hussain, R. J. (2017).Fractal Modeling of Retinal Blood Vessel System.*INTERNATIONAL JOURNAL OF COMPUTERS & TECHNOLOGY*, 12(7), 3734-3741.
- Drachal, K. (2017). A New Attempt to Construct the Laplace Operator on Fractals.
- Duan, J. S., Guo, A. P., & Yun, W. Z. (2017, March).Similarity Solution for Fractional Diffusion Equation.In *Abstract and Applied Analysis* (Vol. 2014).Hindawi Publishing Corporation.
- El Naschie, M. S. (2017). Logarithmic running of Hooft-Polyakov monopole to dark energy. *Int. J. High Energy Phys.*, 1 (1), 1-5.

¡Muchas Gracias!

www.ecorfan.org

contacto@ecorfan.org



ECORFAN®

© ECORFAN-Mexico, S.C.

No part of this document covered by the Federal Copyright Law may be reproduced, transmitted or used in any form or medium, whether graphic, electronic or mechanical, including but not limited to the following: Citations in articles and comments Bibliographical, compilation of radio or electronic journalistic data. For the effects of articles 13, 162,163 fraction I, 164 fraction I, 168, 169,209 fraction III and other relative of the Federal Law of Copyright. Violations: Be forced to prosecute under Mexican copyright law. The use of general descriptive names, registered names, trademarks, in this publication do not imply, uniformly in the absence of a specific statement, that such names are exempt from the relevant protector in laws and regulations of Mexico and therefore free for General use of the international scientific community. BECORFAN is part of the media of ECORFAN-Mexico, S.C., E: 94-443.F: 008- (www.ecorfan.org/ booklets)