

Videos per canal i per tema

El METALMath project

El METALMath project forma part de la EconomicsNetwork. Inclou videos d'estadística i matemàtiques aplicades a les ciències socials. Tenen una antiguetat de una desena d'anys, però són en general aprofitables. Són en anglès i admeten l'opció de subtítols generats automàticament que tenen una qualitat acceptable.

<https://www.youtube.com/user/METALMathProject/videos>

Hi ha cinc series:

[Linear Equations](#)

[Mathematical Review](#)

[Mathematics of Finance and Growth](#)

[Linear Programming](#)

[Differentiation and Integration](#)

Títol i enllaç	Tema	Setmana	Conceptes
Understanding fractions: introduction (1/2) METAL film 1.01a			
Understanding fractions: introduction (2/2). METAL film 1.01b			
Multiplying fractions: Stonehenge. METAL film 1.02			
Percentages: car prices (1/2). METAL film 1.03			
Percentages: car prices (2/2). METAL film 1.03			
The Big Mac Index. METAL film 1.04			
Powers: US merger policy. METAL film 1.05	This film illustrates the use of powers in the context of US Merger Policy, with particular reference to supermarkets.		
Fractions, percentages, and powers: conclusion. METAL film 1.06			
Logarithms and population growth. METAL Film 1.07			
Logarithms and population decline. METAL film 1.08			
Powers: Production functions in gold mining and oil production (1/2). METAL film 1.09			
Powers: Production functions in gold mining and oil production (2/2). METAL film 1.09			
Logarithms: conclusion. METAL film 1.10			
Algebra: Multiplier effects in Poland. METAL film 1.11			
Mathematical review: conclusion. METAL film 1.13			
Algebra: Balanced budget multiplier in Germany. METAL film 1.12			
Linear fractions: budget lines (1/2). METAL film 2.01			

Títol i enllaç	Tema	Setmana	Conceptes
Linear fractions: budget lines (2/2). METAL film 2.01			
Linear consumption functions: East and West Germany. METAL film 2.02			
Linear savings functions: East and West Germany. METAL film 2.03			
Linear functions: summary. METAL film 2.04			
Linear equations in goods and labour markets. METAL film 2.05			
Solving simultaneous equations: French wine. METAL film 2.06			
Linear equations: taxes and subsidies in wine markets. METAL film 2.07			
Solving linear equations: summary. METAL film 2.08			
Solving simultaneous equations: labour markets. METAL film 2.09			
Simultaneous equations: trade unions and minimum wages. METAL film 2.10			
Simultaneous equations: summary. METAL film 2.11			
Simultaneous equations: production and cost in Swedish truck production. METAL film 2.13			
Simultaneous equations: production and cost in Bulgarian truck production. METAL film 2.14			
Series two (Linear Algebra) conclusion. METAL film 2.15			
Compound interest: building up personal savings. METAL film 3.02			
Compound interest: establishing a formula. METAL film 3.01			

Títol i enllaç	Tema	Setmana	Conceptes
Compound growth rates in an Austrian spa. METAL film 3.03 8:15	MetalMathProject Bad Blumau is a remarkable health and fitness spa 40 miles from Vienna. In this film we assume that managers wish to add a new service at the spa that will cost 100,000 Euro to establish. Assuming an increase in visitor numbers attracted by the new service, how long will it take for the investment to be recovered?		
Geometric series: clearing a mortgage debt. METAL film 3.04			
The mathematics of finance: understanding DCF techniques. METAL Film 3.05			
Discounted cash flow: Investing in education. METAL Film 3.06			
Eurotunnel: a bad investment. METAL film 3.08			
Geometric series: changes over time in a country's living standards. METAL film 3.09			
Geometric progression: growth in European economies. METAL film 3.10			
Geometric progression: How long will the World's oil stock last? METAL film 3.11			
Introduction to linear programming (1/3) METAL film 4.01			
Linear programming - final two steps (2/3) METAL film 4.02			
Introduction to linear programming (3/3) METAL film 4.03			
Linear programming: tomato farmer (1/3) METAL film 4.04a			
Linear programming: tomato farmer (2/3) METAL film 4.04b			
Linear programming: tomato farmer (3/3) METAL film 4.05			

Títol i enllaç	Tema	Setmana	Conceptes
Non-linear functions: introduction. METAL film 4.06	The mathematics of Linear Programming is a useful tool. However, many relationships are not linear. How do we establish the price and quantity of a commodity if supply and demand functions are non-linear? Similarly, there may be non-linear relationships in the market for labour.		
Non-linear functions: labour markets. METAL film 4.07	If a labour market has both non-linear supply and demand curves, how can we find the equilibrium wage rate and quantity of labour supplied? This segment looks at examples of non-linear supply and demand curves in several industries.		Corbes de segon grau per la demanda i la oferta
Introduction to calculus. METAL film 4.08			
Calculus: Determining marginal revenue. METAL film 4.09			
Calculus: income growth, consumption and savings. METAL film 4.10			
Linear programming: conclusion. METAL film 4.11			
Differentiation: How large should a university be? (1/2) METAL film 5.01			
Differentiation: How large should a university be? (2/2) METAL film 5.02			
Finding the optimum number of floors in hotel construction (1/3) METAL Film 5.03			
Finding the optimum number of floors in hotel construction (3/3) METAL Film 5.05			
Finding the optimum number of floors in hotel construction (2/3) METAL Film 5.04			
Finding the optimum number of floors in hotel construction (3/3) METAL Film 5.05			

[illegible]

Títol i enllaç	Tema	Setmana	Conceptes