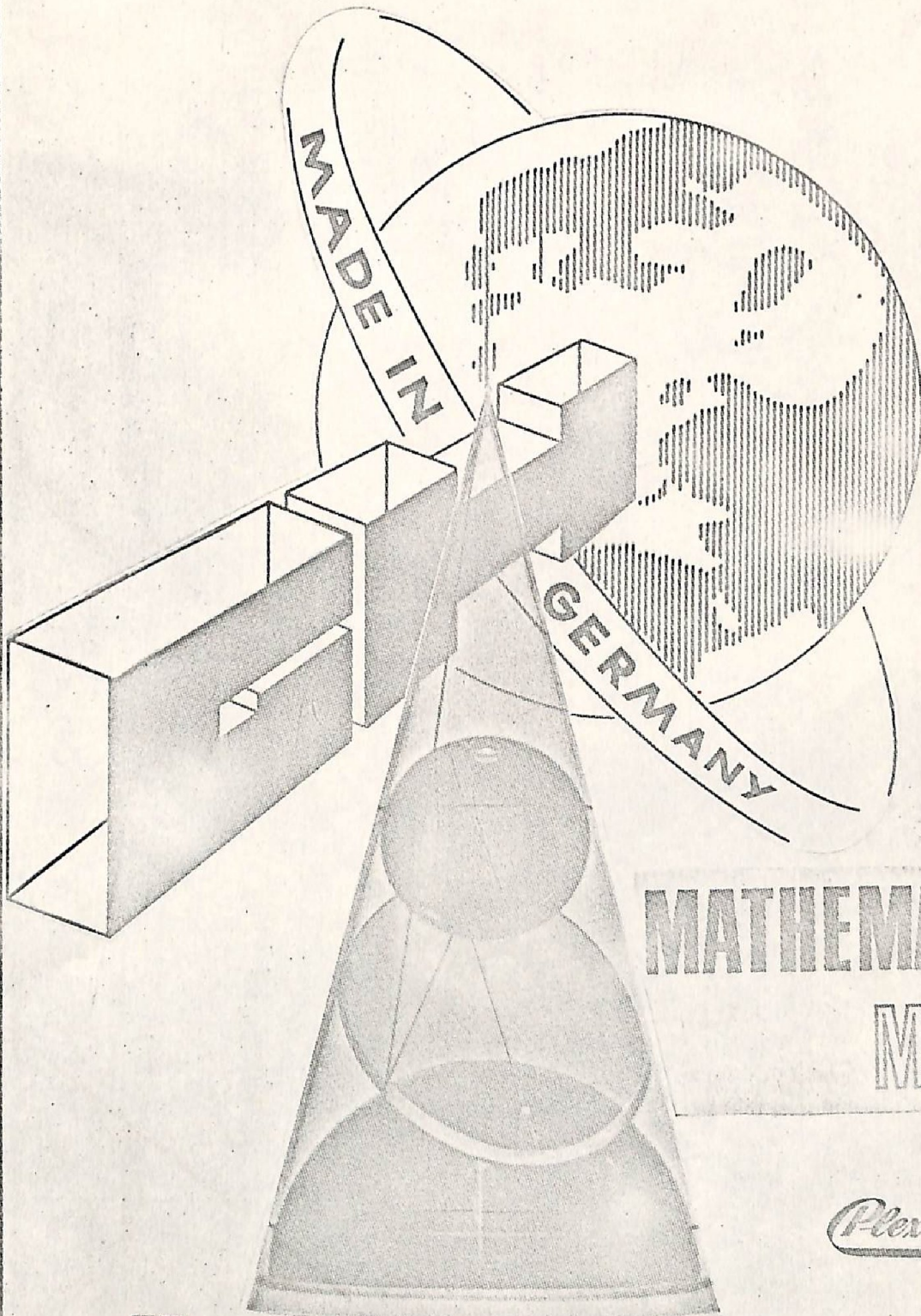


MATEMÁTICA MODERNA

COLEÇÕES

- B) - 22 jogos de Modelos - fôlhas 1, 2 e 3  
C) - 28 jogos de Modelos - fôlhas 1, 3, 4 e 5

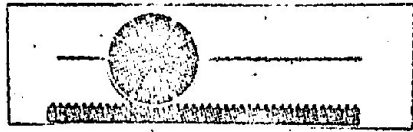


MATHEMATICAL  
MODELS

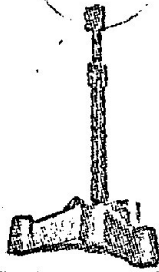
*Plexiglas*

GÜNTER HERRMANN

1.850,00 + 15% I.P.  
3.150,00 + 15% I.P.



206

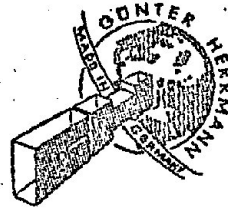


*Plexiglas*

Demonstration model for the formula  $C = 3, 14 \times d$ .  
 (Circumference of a circle.) Price does not include  
 base 700/A and supporting device 700/C.  
 Overall dimensions = 390 x 120 mm

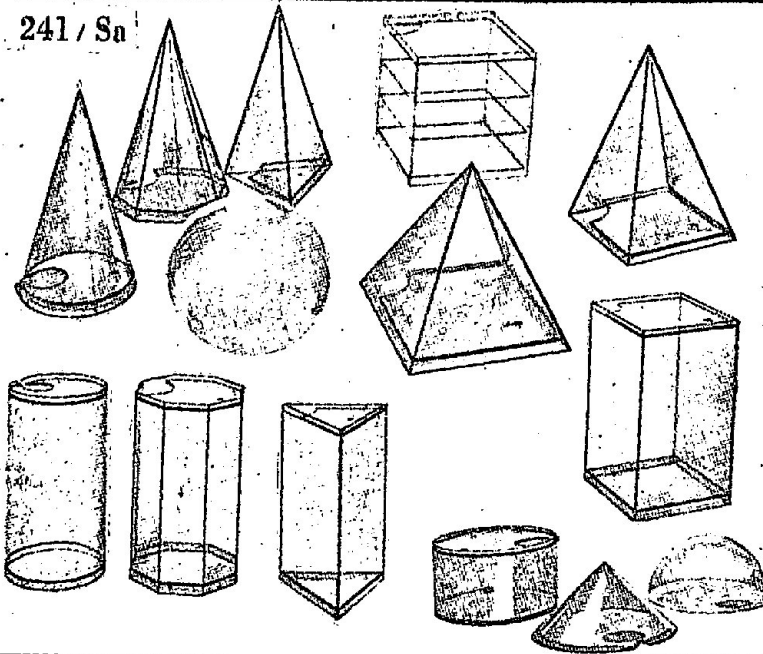


**MATHEMATICAL**



**MODELS**

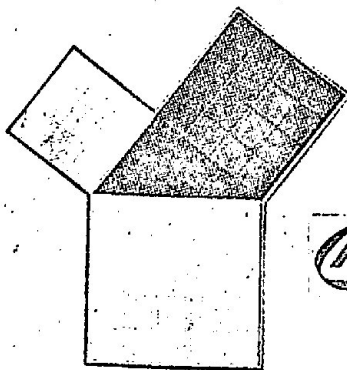
241 / Sa



consists of:	
3-sided prism	} bases are equal.
3-sided pyramid	
4-sided prism	} bases are equal.
4-sided pyramid	
8-sided prism	} bases are equal.
8-sided pyramid	
Cylinder	} bases are equal.
cone	
Height = 150 mm	} bases are equal.
Cube	
quadratic pyramid	
Height of pyramid	
= edge of cube = 100 mm	
Sphere	
Diameter = 100 mm	
Hemisphere	
cylinder	
cone	
Height of cone and cylinder	
= radius of all three solids	
= 60 mm	

241 / Sa

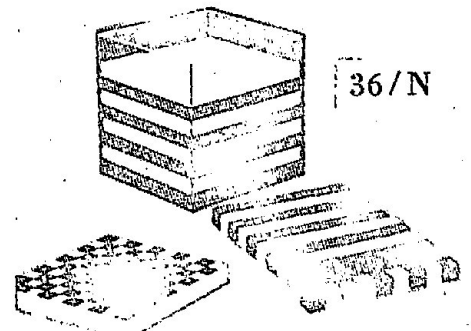
34



*Plexiglas*

Demonstration model for Pythagoras' theorem.  
 Hypotenuse = 100 mm  
 This model consists of detachable elements of area  
 that can be used to fill the square on the hypote-  
 nuse or the squares on the remaining two sides.

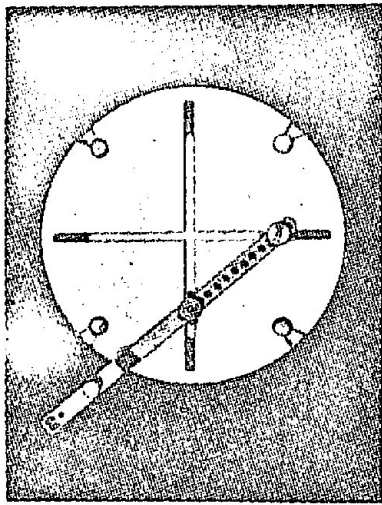
10 cm cube transparent envelope.  
 Useful for the teaching of volumes.



36 / N

607

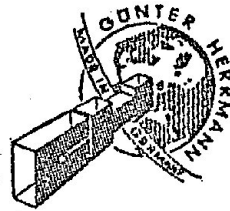
Elliptical compass.  
Diameter of circle = 270 mm



FÖLHA N° 2



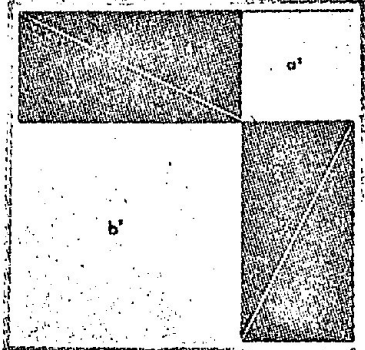
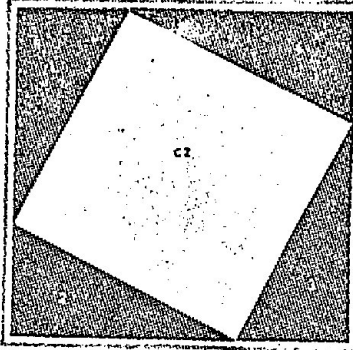
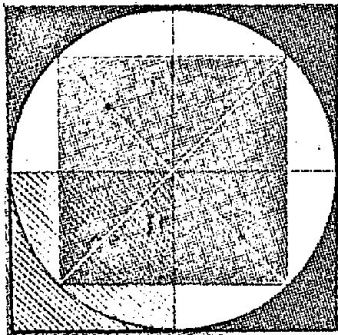
MATHEMATICAL



MODELS

234

Model for the area of a circle,  
with circumscribed and inscribed  
squares. Can be dismantled; areas  
in different colours.  
245 x 245 mm



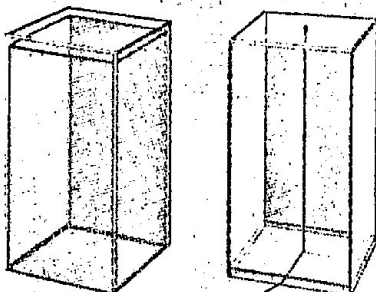
Verification model for Pythagoras' theorem, with  
differently-coloured transparent areas.  
Can be dismantled.  
240 x 240 mm

247

*Plexiglas*

210 Square prism with movable altitude and coloured,  
transparent base.  
Height = 150 mm

213 Square prism with external surface (net) which can  
be unfolded.  
Height = 150 mm

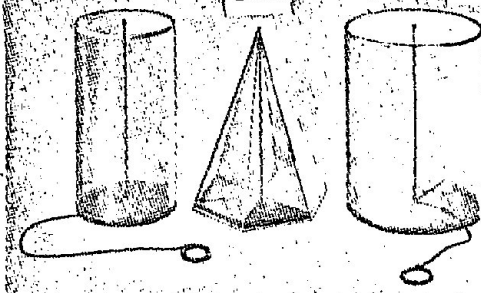


213

217

212

216



217 Cylinder with movable altitude and coloured base.  
Diameter = 80 mm, height = 155 mm

212 Hexagonal pyramid with altitude and marked diagonals and with coloured base.  
Height = 150 mm

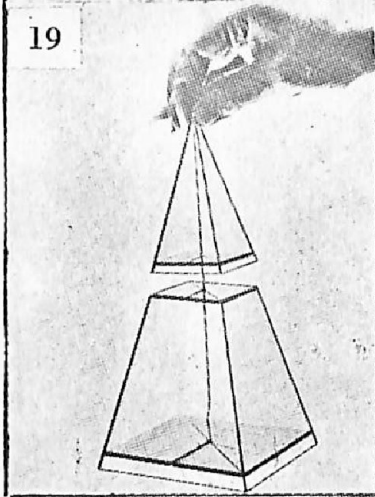
216 Cylinder with movable altitude and coloured base.  
Diameter = 110 mm, height = 150 mm

Pyramid which can be dismantled into truncated pyramid and supplementary pyramid, with movable axis.

Total height = 200 mm

This model shows the relationship between two similar solids and also the relationship between the altitude and the slant height of a pyramid.

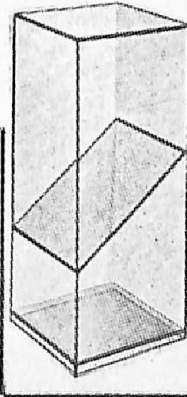
19



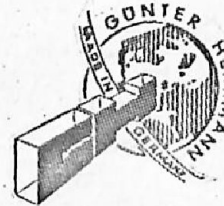
*Plexiglas*

17/4

Four-sided prism with oblique section.  
Height = 200 mm



MATHEMATICAL

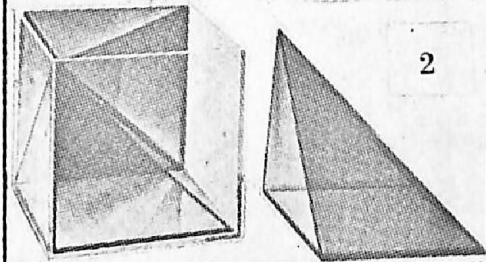


MODELS

Cube, which can be dismantled into three pyramids of equal volume.

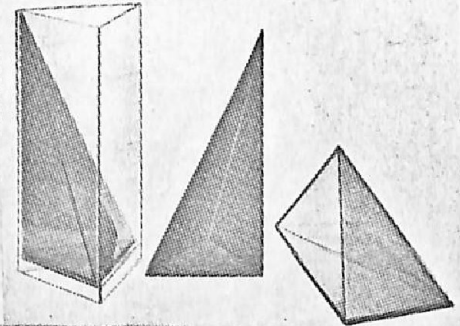
Edge of cube 100 mm

This model is a variation on Model No. 3/G.



2

3/G

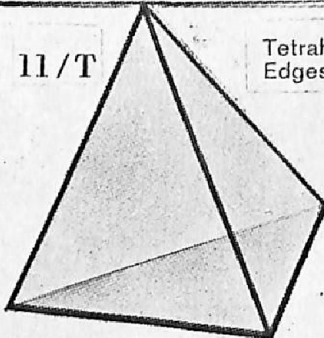


Three-sided prism with equal sides, which can be dismantled into three pyramids of equal volume.  
Height = 200 mm

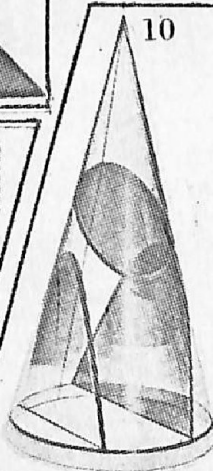
This model demonstrates the fact that the volume of a pyramid is a third of the volume of a prism with the same base and the same altitude.

11/T

Tetrahedron.  
Edges 150 mm

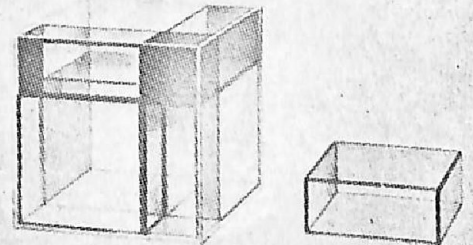


10

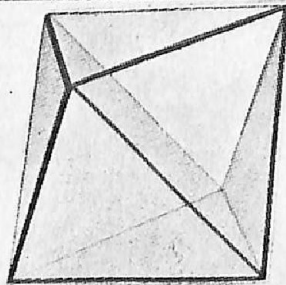


Cone with elliptical, parabolic and hyperbolic sections  
Height = 260 mm  
Particularly suitable for teaching conic sections.

37

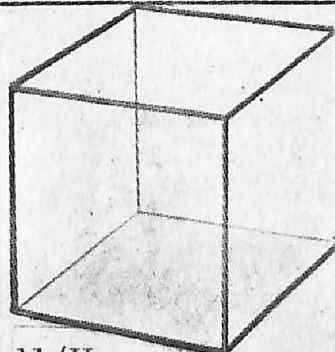


Demonstration model for formula  $V = (a + b)^3$ .  
 $a + b = 100$  mm



11/O

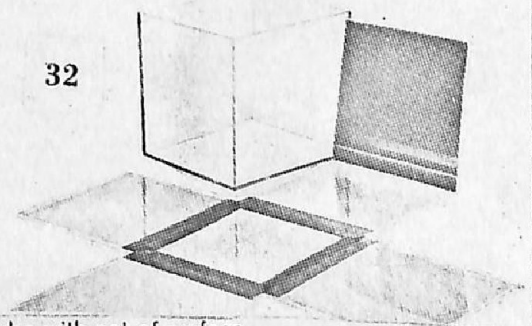
Octahedron.  
Edges = 100 mm  
Invaluable for the teaching of solids.



11/H

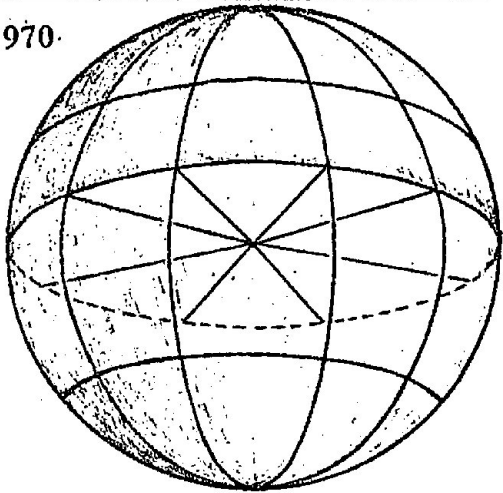
Hexahedron.  
Edges = 100 mm (n. i.)

32

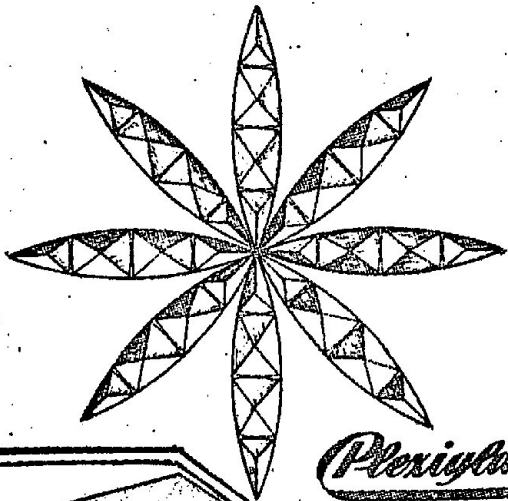


Cube with net of surface.  
Edges 100 mm  
For use when discussing the surfaces of solids and in the teaching of technical drawing.

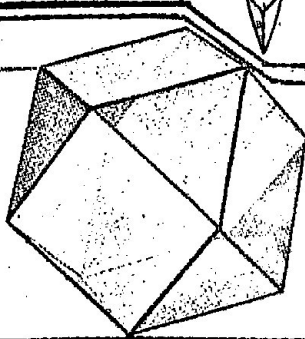
970



Model for use when teaching spheres.



*Plexiglas*



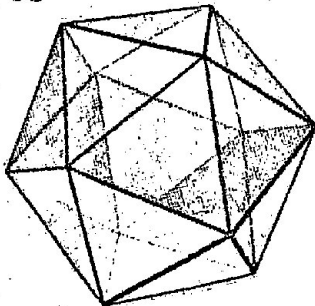
40

Polyhedron (combination of hexahedron and octahedron). Edges = 70 mm

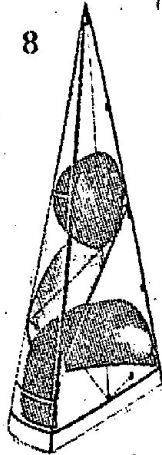
Cone with spheres of contact and inclined elliptical plane section, cut in half by an axial plane through the major axis of the ellipse; for two- and three-dimensional demonstrations. Height = 260 mm

38

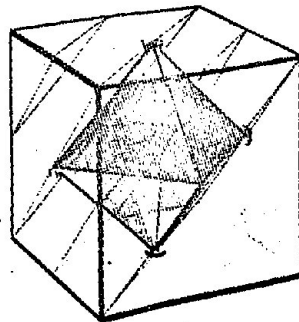
Icosahedron. Edges = 60 mm



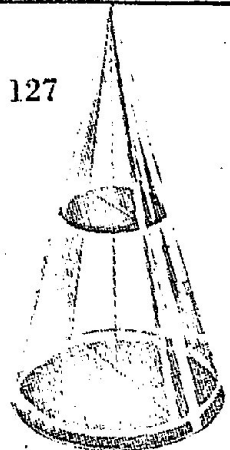
8



41



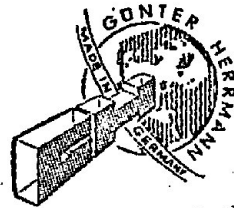
127



Cone with horizontal and vertical sections. Height = 260 mm



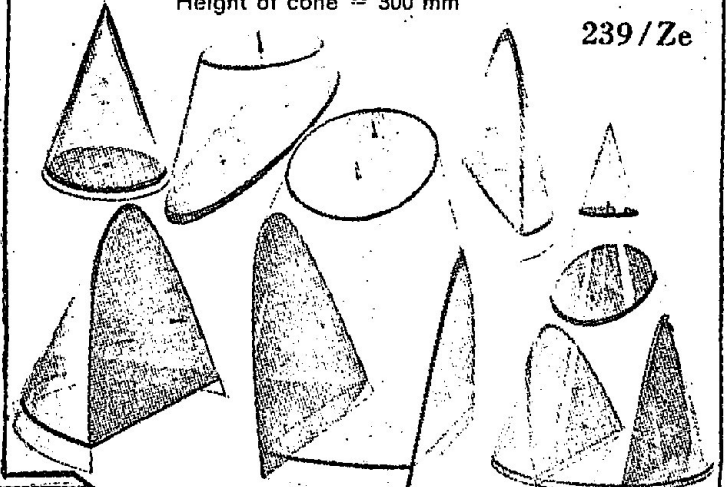
# MATHEMATICAL



# MODELS

Cone with circle, ellipse, hyperbola and parabola. Can be dismantled, as shown. Height of cone = 300 mm

239/Zc



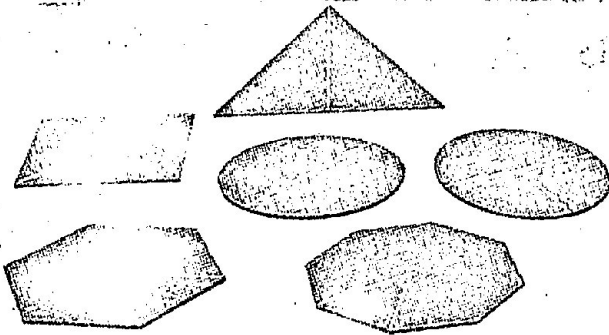
Octahedron inside cube, with various construction lines.

Edges of cube = 100 mm

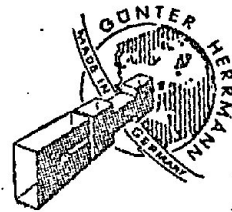
This model being transparent, demonstrates well the projections of the enclosed octahedron on the sides of the cube and their relative dimensions.

513

Models of regular plano figures.  
A = 100 cm<sup>2</sup>



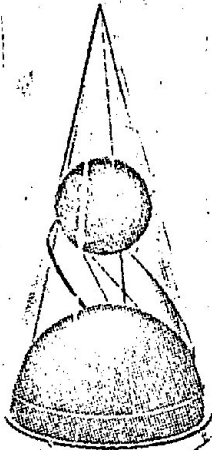
MATHEMATICAL



MODELS

Cone with spheres of contact and inclined elliptical plane section.  
Height = 260 mm  
For use in teaching conic sections and in deriving the equation of an ellipse.

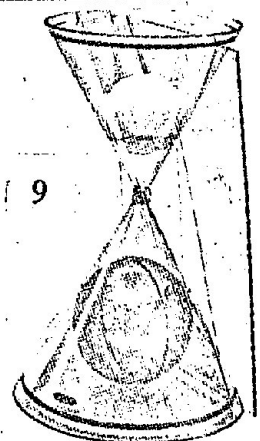
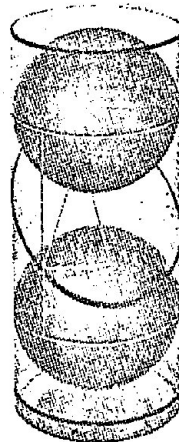
6



*Plexiglas*

Cylinder with spheres of contact and inclined plane section.  
Height = 190 mm

61Z

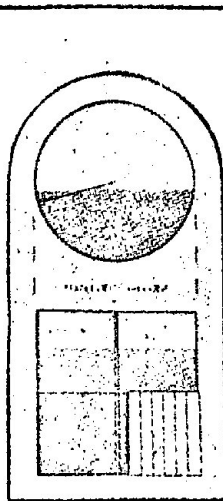
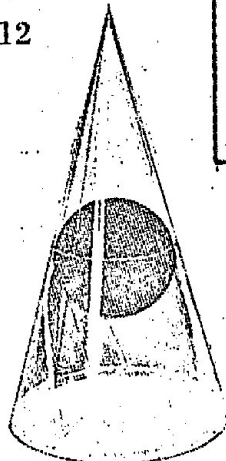


9

Double cone with hyperbolic section and spheres of contact.  
Height = 235 mm

Cone with sphere of contact and parabolic section.  
Height = 260 mm  
Useful in the teaching of conic sections and in deriving the equation of a parabola.

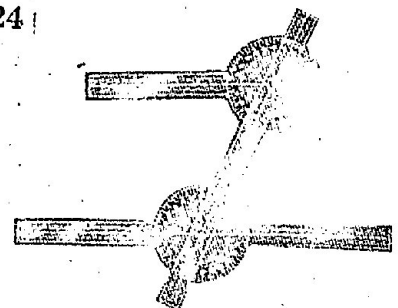
12



4

Demonstration model for the formula  $A = \frac{3}{14} r^2$   
Height = 260 mm  
This model is filled with sand which flows from a circle to a square when the model is inverted.

624



Demonstration model for the angles formed by two parallel lines and a transversal.  
Length of parallels = 300 mm



# Sociedade Importadora Suíça Ltda.

RIO DE JANEIRO

SÃO PAULO

PÓRTO ALEGRE

RECIFE

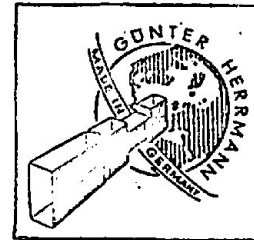
RIO DE JANEIRO  
AVENIDA RIO BRANCO, 14 - 4.º AND.  
TELEFONE 23-2325

SÃO PAULO  
RUA 7 DE ABRIL, 264  
TELEFONE 35-4860

PÓRTO ALEGRE  
R. VOLUNTÁRIOS DA PÁTRIA, 595  
TELEFONE 4-1037

RECIFE  
AV. CONS. AGUIAR, 2286 AP. 103 B  
TELEFONE 61283

MATEMÁTICA MODERNA  
MODELOS MATEMÁTICOS  
TRADUÇÃO



Modelo	Descrição
2	Cubo desmontável em 3 pirâmides iguais. Canto do cubo 100 mm. Este modelo é uma variante do modelo 3/G. -
3/G	Prisma triangular com lados iguais que se divide em 3 pirâmides triangulares do mesmo volume. Altura 200mm. Este modelo demonstra o fato de que o volume de uma pirâmide é de 1/3 do volume de um prisma com a mesma base a mesma altura. -
4	Modelo de demonstração para a fórmula $A = 3,14 r^2$ . Altura 200 mm. Este modelo tem enchimento de areia que corre de um círculo até um quadrado quando se vira o modelo. -
6	Cone com esferas tangentes e seção plana inclinada. Altura 260mm. Para a demonstração de cortes cônicos e da equação de uma elipse. -
6/Z	Cilindro com esferas tangentes e seção plana inclinada. Altura 190mm. -
8	Cone com esferas de contato com seção elíptica plana inclinada, dividida ao meio por um plano axial através do eixo maior da elipse; para demonstração da 2ª e 3ª dimensão. -
9	Cone duplo com corte hiperbólico e esferas tangentes. Altura 235mm. -
10	Cone com corte elíptico, parabólico e hiperbólico. Altura 260mm. Especialmente útil para ensinar cortes cônicos. -
11/H	Hexaedro (alturas 100mm). -
11/T	Tetraedro (alturas 150mm). -
11/O	Octaedro (alturas 100mm), de grande valor para o ensino de sólidos. -
12	Cone com esferas tangentes e corte parabólico. Altura 260 mm. Útil na demonstração de cortes cônicos e a equação da parábola. -

MODELOS MATEMÁTICOS - Tradução - Continuação

Modelo	Descrição
17/4	Prisma quadrilateral com corte diagonal. Altura 200mm. -
19	Pirâmide que pode ser desmontada em base e ponta com eixo móvel. Altura total 200mm. Este modelo mostra a relação entre dois sólidos similares e também a relação entre a altura total e a altura do declive e uma pirâmide. -
34	Modelo para a demonstração do teorema de Pitágoras. Hipotenusa 100mm. Este modelo consiste de elementos separáveis que podem ser usados para preencher o quadrado em cima da hipotenusa ou os quadrados em cima dos outros 2 lados. -
36/N	Cubo de 10cm. transparente. Útil para ensinar volumes. -
37	Modelo para demonstração da fórmula $V = (a + b)^3$ ; $(a + b) = 100mm$ . -
38	Icosaedro. Cantos 60mm. -
40	Poliedro (combinação de Hexaedro e Octaedro). Cantos 70mm. -
41	Octaedro dentro do cubo, com várias linhas de estrutura. Cantos do cubo 100mm. Como o modelo é transparente, demonstra bem as projeções do octaedro inscrito nos lados do cubo e as dimensões delas. -
127	Cone com cortes horizontais e verticais. Altura 260mm. -
206	Modelo de demonstração para a fórmula $C = 3,14 \times d$ (circunferência de um círculo. No preço não está incluído a base 700/A e suporte 700/C. Dimensões 390 x 120mm. -
210	Prisma quadrilateral. Com altura móvel e base colorida transparente. Altura 150mm. -
212	Pirâmide hexagonal com altura e diagonais indicados, com base colorida. Altura de 150mm. -
213	Prisma quadrilateral desmontável. Altura 150mm. -
216	Cilindro com altura móvel e base colorida. Diâmetro de 110mm. -
217	Cilindro com altura móvel e base colorida. Diâmetro 80 mm. e altura 155mm. -
234	Modelo para área do círculo com quadrados inscritos e circunscritos. Desmontável, áreas em cores diferentes. 245 x 245 mm. -
239/Ze	Cone com corte circular e lipsoidal, hiperbólico e parabólico. Pode ser desmontado. Altura do cone de 300 mm. -
241/Sa	Jogo de sólidos para enchimento com líquidos. Consiste de: Prisma trilaterial e pirâmide trilaterial, com a mesma base; Prisma quadrilateral e pirâmide quadrilateral, com a mesma base; Prisma octagonal e pirâmide octagonal, com a mesma base; Cilindro e cone, com a mesma base. Altura = 150mm. -

(continua)



MODELOS MATEMÁTICOS - Tradução - Continuação

Modelos	Descrição
241/Sa (Continuação)	Cubo e pirâmide quadrilateral, com a mesma base. Altura da pirâmide e canto do cubo = 100mm. Esfera - Diâmetro = 100mm. Hemisfério, cilindro e cone. Altura do cone e cilindro = ao raio dos três sólidos = 60mm
247	Modêlo para demonstração do teorema de Pitágoras, com áreas transparentes de várias cores. Desmontável, de 240 x 240mm.
513	Modelos de figuras planas regulares. (Área = 100 cm <sup>2</sup> ).
607	Compasso elíptico. (Diâmetro do círculo = 270mm.)
624	Modêlo para demonstração de ângulos, formados por duas linhas paralelas e uma linha transversal. Comprimento das paralelas = 300mm.
970	Modêlo de demonstração de esferas.

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