

Mathematik? Spiel!

$$1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 + \dots + n$$

21

$$1 + 2 + 3 + \dots + n$$

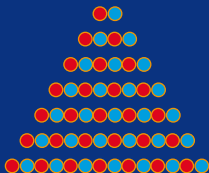


$$1 + 2 + 3 + \dots + n$$



25

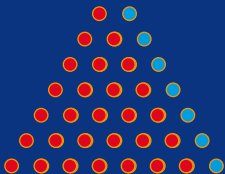
$$1 + 2 + 3 + \dots + n$$



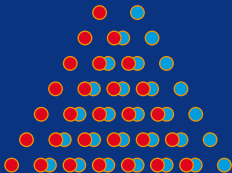
$$1 + 2 + 3 + \dots + n$$



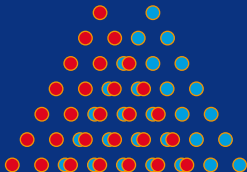
$$1 + 2 + 3 + \dots + n$$



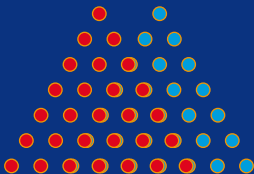
$$1 + 2 + 3 + \dots + n$$



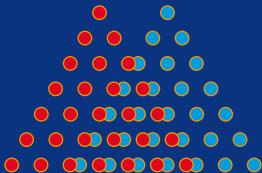
$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

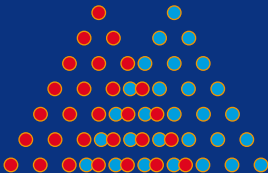


$$1 + 2 + 3 + \dots + n$$

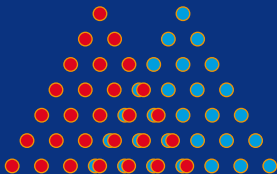


41

$$1 + 2 + 3 + \dots + n$$

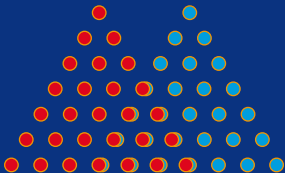


$$1 + 2 + 3 + \dots + n$$

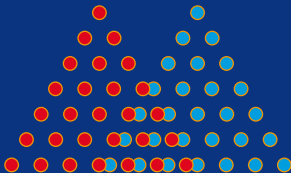


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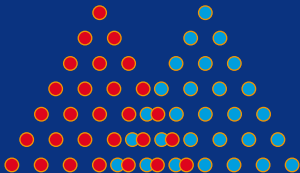
$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

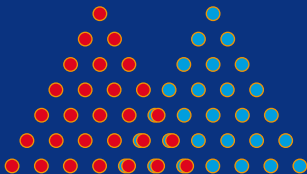


$$1 + 2 + 3 + \dots + n$$

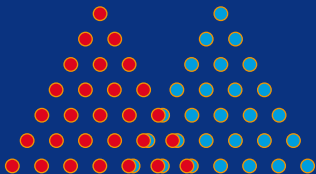


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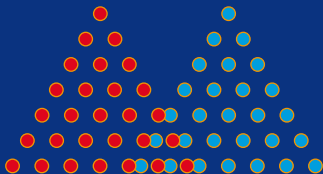
$$1 + 2 + 3 + \dots + n$$



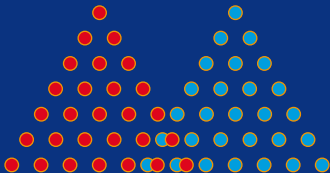
$$1 + 2 + 3 + \dots + n$$



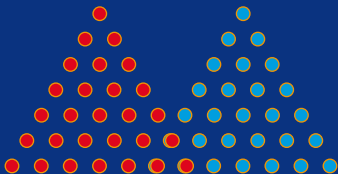
$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

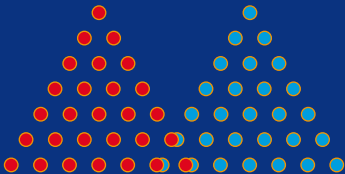


$$1 + 2 + 3 + \dots + n$$

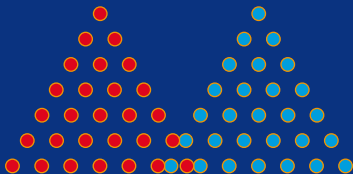


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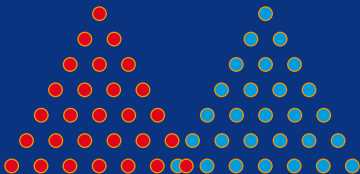
$$1 + 2 + 3 + \dots + n$$



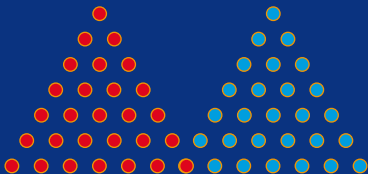
$$1 + 2 + 3 + \dots + n$$



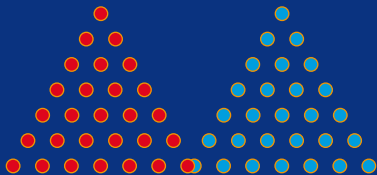
$$1 + 2 + 3 + \dots + n$$



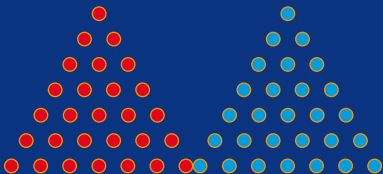
$$1 + 2 + 3 + \dots + n$$



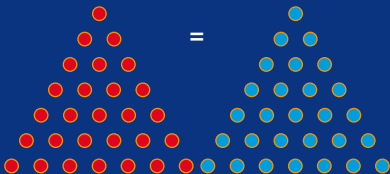
$$1 + 2 + 3 + \dots + n$$



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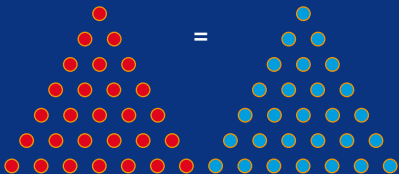


$$1 + 2 + 3 + \dots + n$$

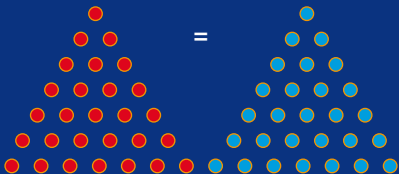


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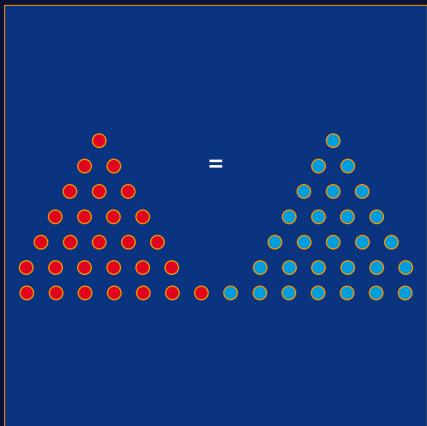
$$1 + 2 + 3 + \dots + n$$



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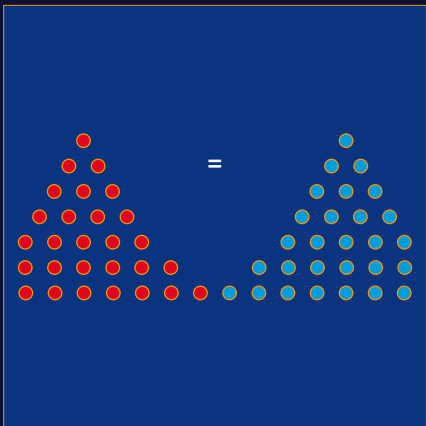


$$1 + 2 + 3 + \dots + n$$

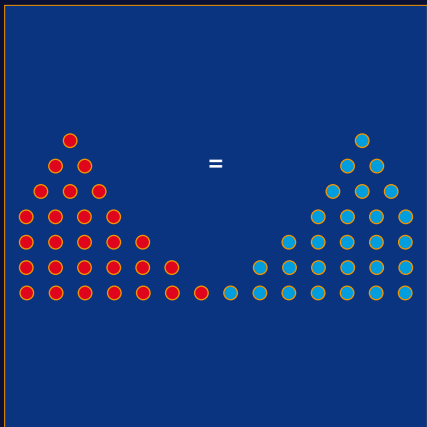


81

$$1 + 2 + 3 + \dots + n$$

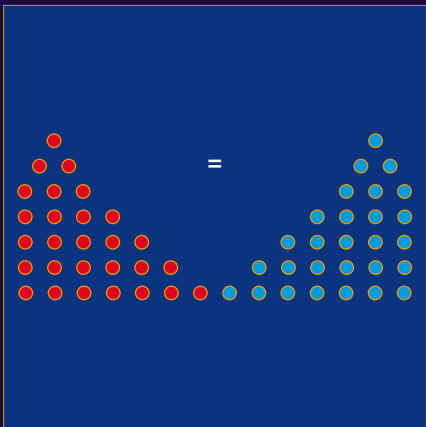


$$1 + 2 + 3 + \dots + n$$

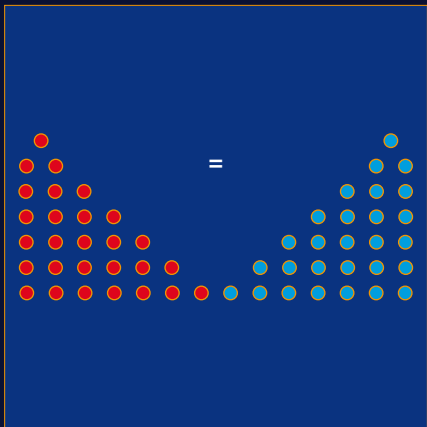


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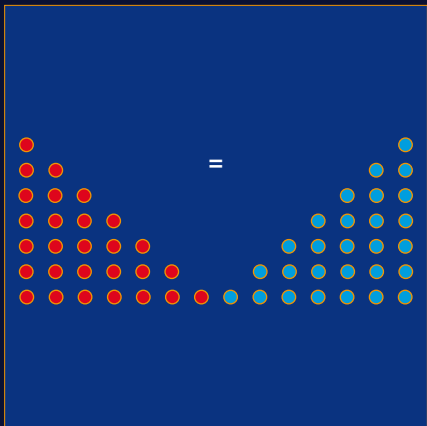
$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

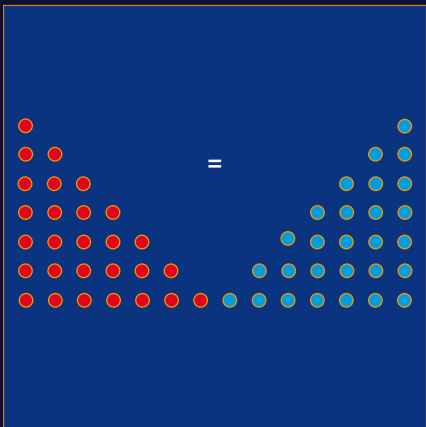


$$1 + 2 + 3 + \dots + n$$

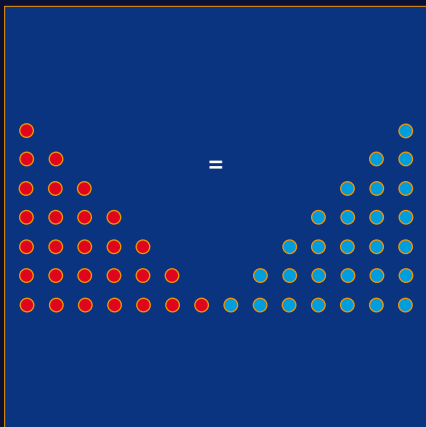


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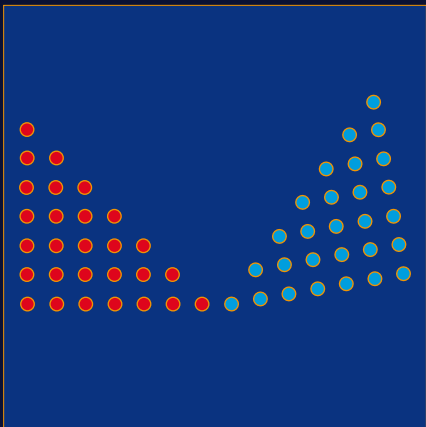
$$1 + 2 + 3 + \dots + n$$



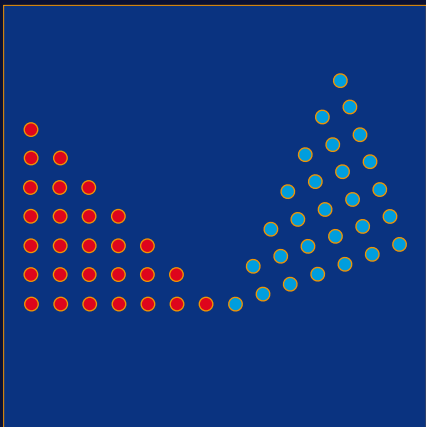
$$1 + 2 + 3 + \dots + n$$



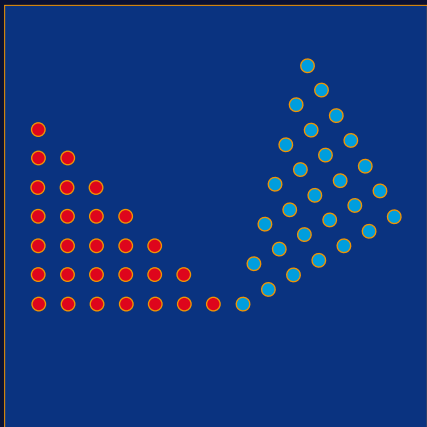
$$1 + 2 + 3 + \dots + n$$



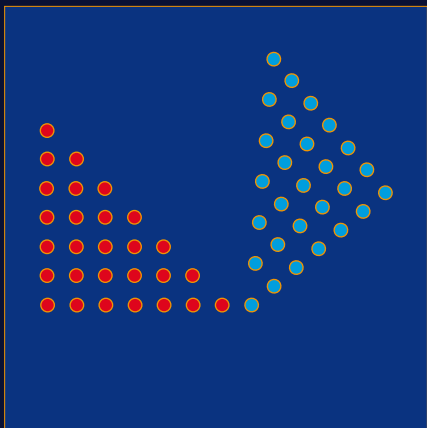
$$1 + 2 + 3 + \dots + n$$



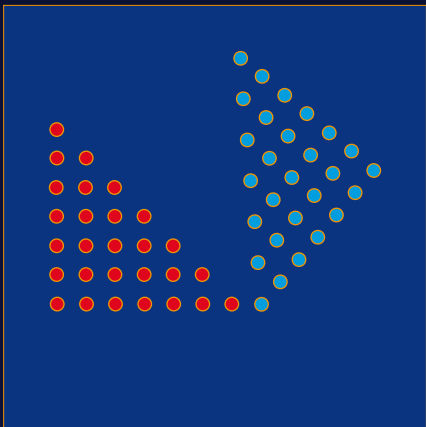
$$1 + 2 + 3 + \dots + n$$



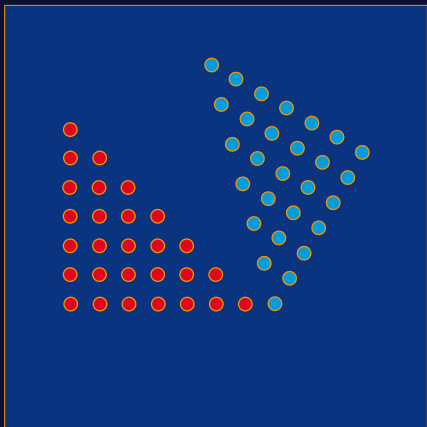
$$1 + 2 + 3 + \dots + n$$



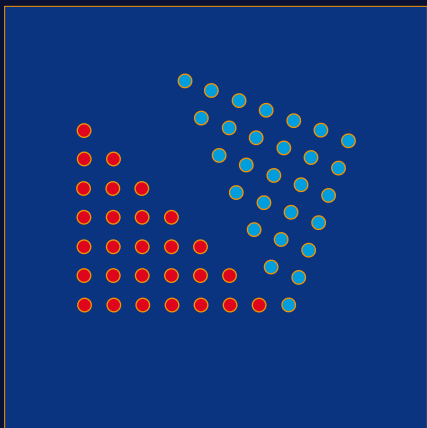
$$1 + 2 + 3 + \dots + n$$



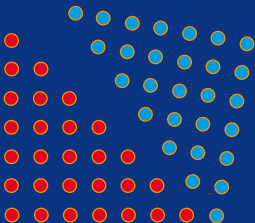
$$1 + 2 + 3 + \dots + n$$



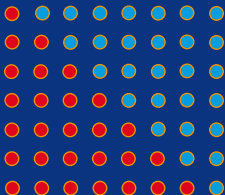
$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

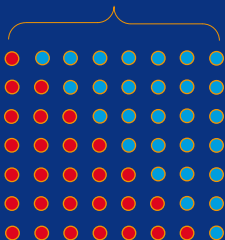


$$1 + 2 + 3 + \dots + n$$



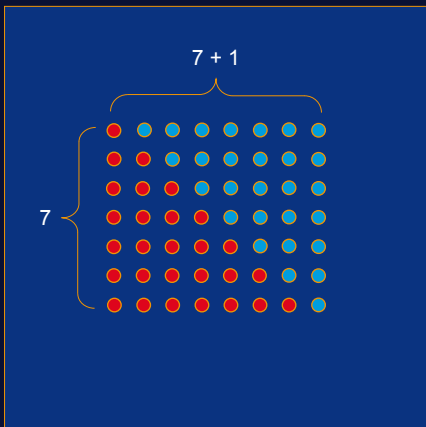
$$1 + 2 + 3 + \dots + n$$

$$7 + 1$$



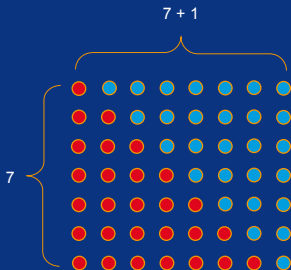
115

$$1 + 2 + 3 + \dots + n$$



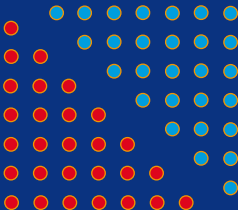
117

$$1 + 2 + 3 + \dots + n$$



$$\text{Anzahl aller Punkte: } 7 \cdot (7 + 1) = 56$$

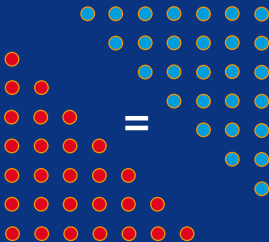
$$1 + 2 + 3 + \dots + n$$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

121

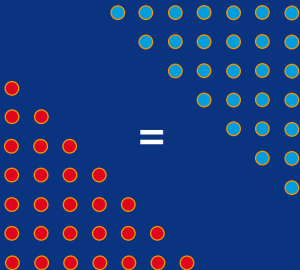
$$1 + 2 + 3 + \dots + n$$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

123

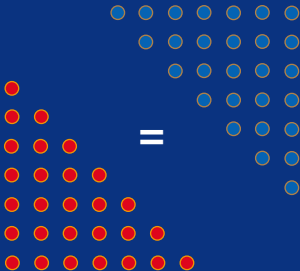
$$1 + 2 + 3 + \dots + n$$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

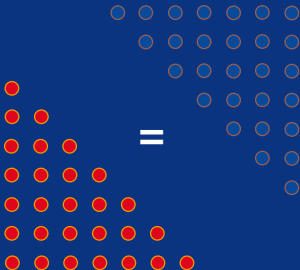
125

$$1 + 2 + 3 + \dots + n$$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

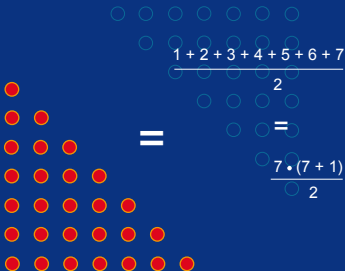
$$1 + 2 + 3 + \dots + n$$



Anzahl aller Punkte: $7 \cdot (7 + 1)$

$$1 + 2 + 3 + \dots + n$$

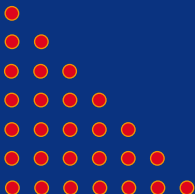
Die roten Punkte sind die
Hälfte aller Punkte:



Anzahl aller Punkte: $7 \cdot (7 + 1)$

$$1 + 2 + 3 + \dots + n$$

Die roten Punkte sind die
Hälfte aller Punkte:

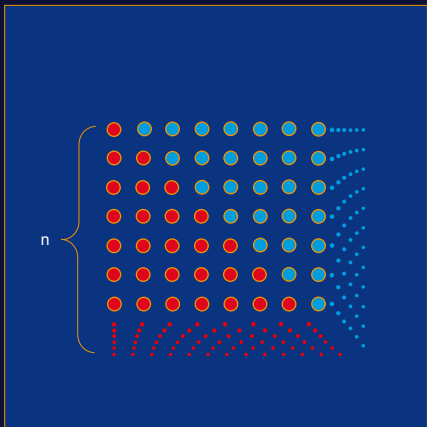


$$\frac{1 + 2 + 3 + 4 + 5 + 6 + 7}{2}$$

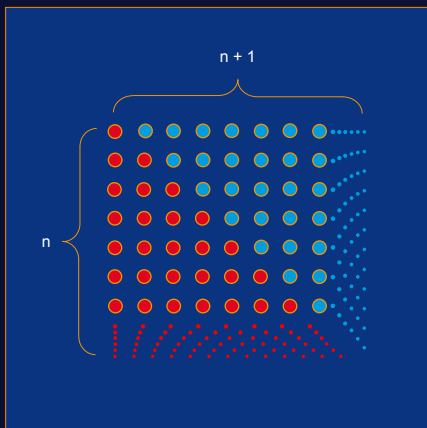
=

$$\frac{7 \cdot (7 + 1)}{2}$$

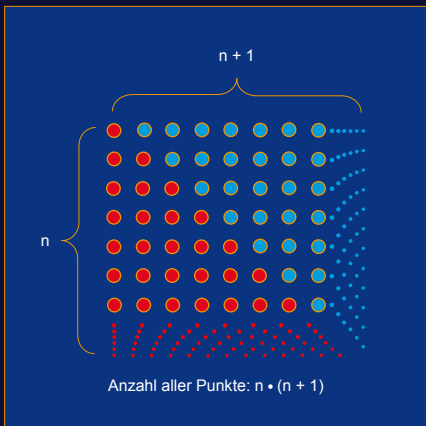
$$1 + 2 + 3 + \dots + n$$



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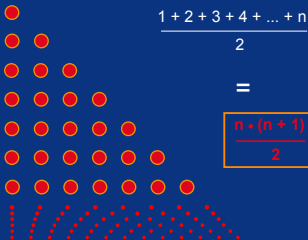


$$1 + 2 + 3 + \dots + n$$



$$1 + 2 + 3 + \dots + n$$

Die roten Punkte sind die
Hälfte aller Punkte:



Mathematik?

Spiel!

realisierte Daumenkinos

- Scheitel-, Neben-, Wechsel-, Stufen-, Basiswinkel
- Winkelsumme im Dreieck
- Thaleskreis (Euklid, Elemente, Buch III)
- Pythagoras, Zerlegung (Euklid, Elemente, Buch I)
- Kathetensatz (Euklid, Elemente, Buch I)
- Höhensatz (Euklid, Elemente, Buch VI u. Buch II)
- Schnitte durch den Würfel
- Verfolgungskurve
- Mönchchen des Hippokrates von Chios
- Ellipse im Kreis
- $(a + b + c + \dots)^2$
- Hinged Tessellation

Daumenkinos in Planung

- Ellipse, Parabel, Hyperbel
- Hexe der Agnesi
- Satz von Morley
- Sinus
- Satz von Ceva
- Dreiecksgeometrie, Eulergerade
- von der Sekante zur Tangente
- Riemannsches Integral
- Flächenverwandlung
- Sprachspiele
- von 0 bis 100
- ...