



Triangle



Square



Circle

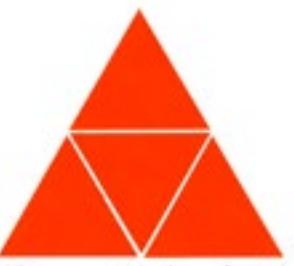
Triangle



An equilateral triangle is divided into two equal triangles by a line bisecting the base, drawn from the vertex of the opposite angle.



An equilateral triangle is divided into three equal triangles by the angle bisectors.



An equilateral triangle is divided into four equal triangles by conjoining the mid-points of the sides.



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When an equilateral triangle is divided by the perpendicular drawn from the vertex of an angle to the opposite side, the result is two right-angled triangles. Their hypotenuses are equal to the side of the equilateral triangle. The longer catheti are equal to the height of the equilateral triangle. The shorter catheti form the base which is equal to one-half the base of the equilateral triangle.



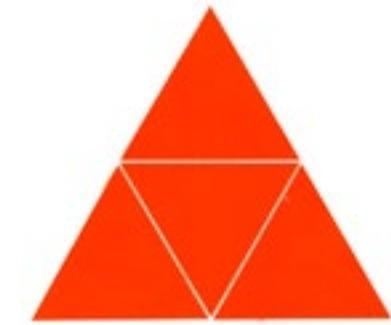
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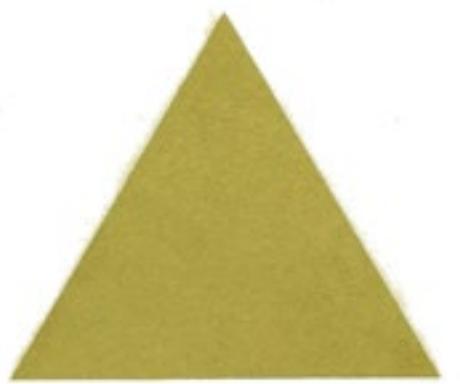
The longest side of each obtuse-angled isosceles triangle is equal to the side of the equilateral triangle which has been divided into thirds.



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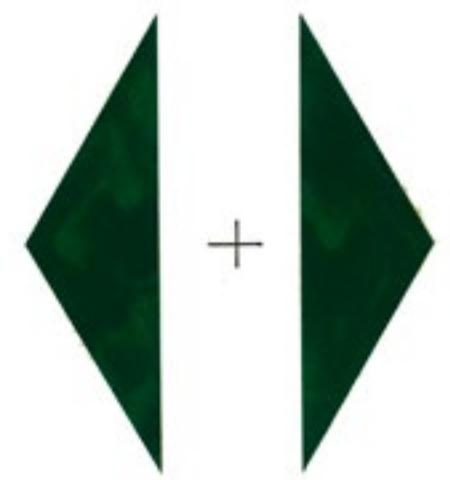
the side of the four small equilateral triangles is equal to one half of the side of the large equilateral triangle.



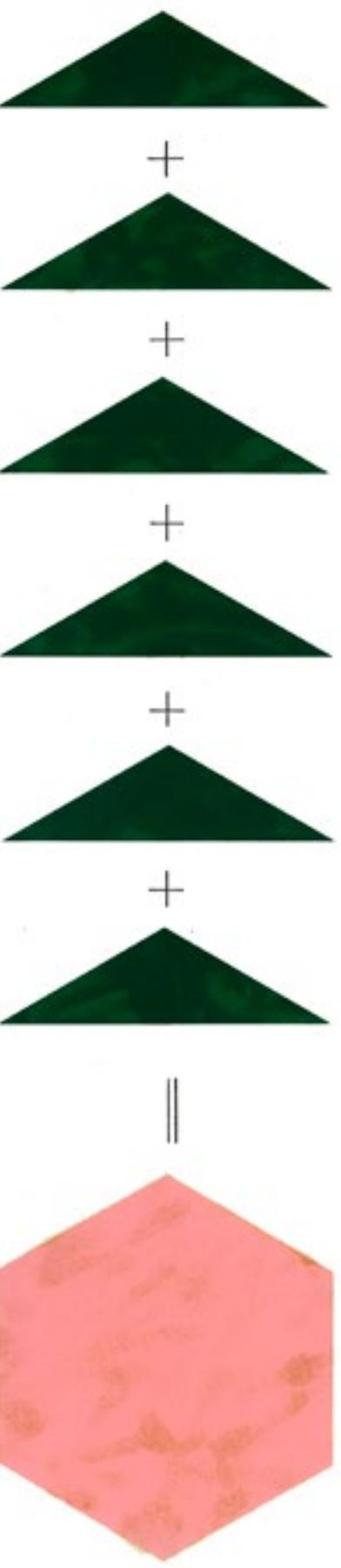
similarity



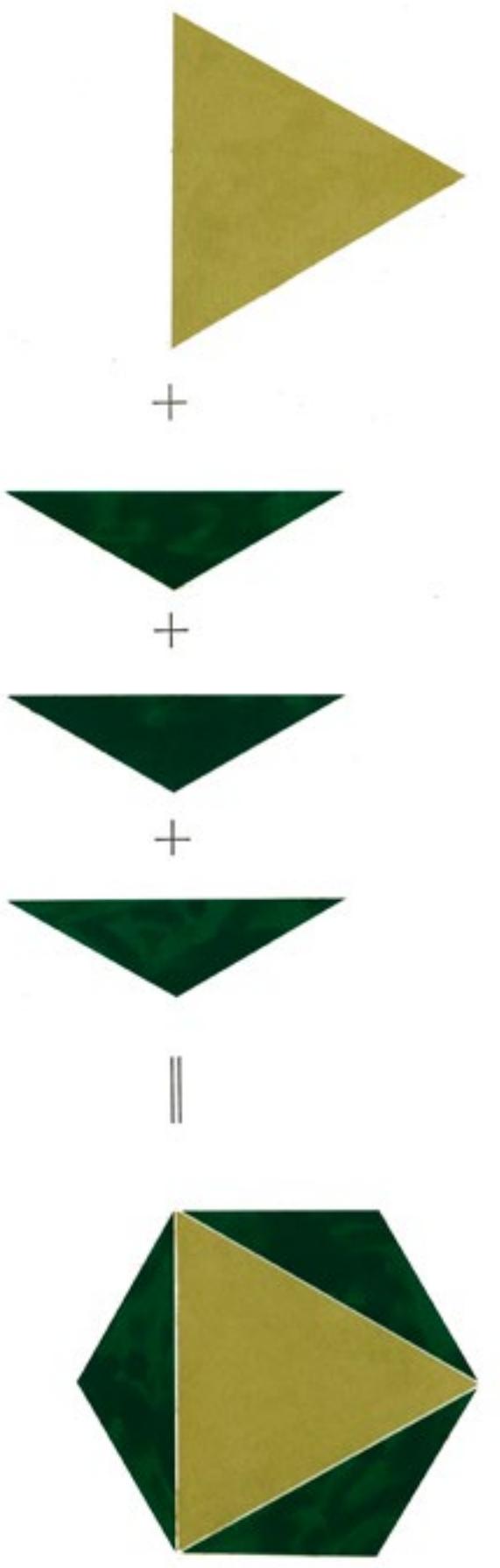
1st Combination



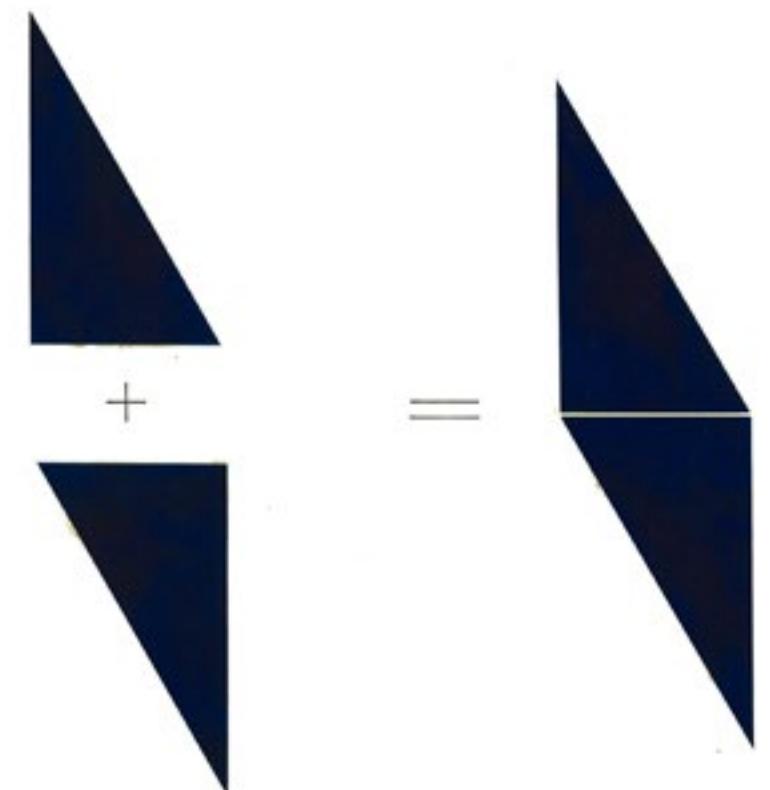
3rd Combination



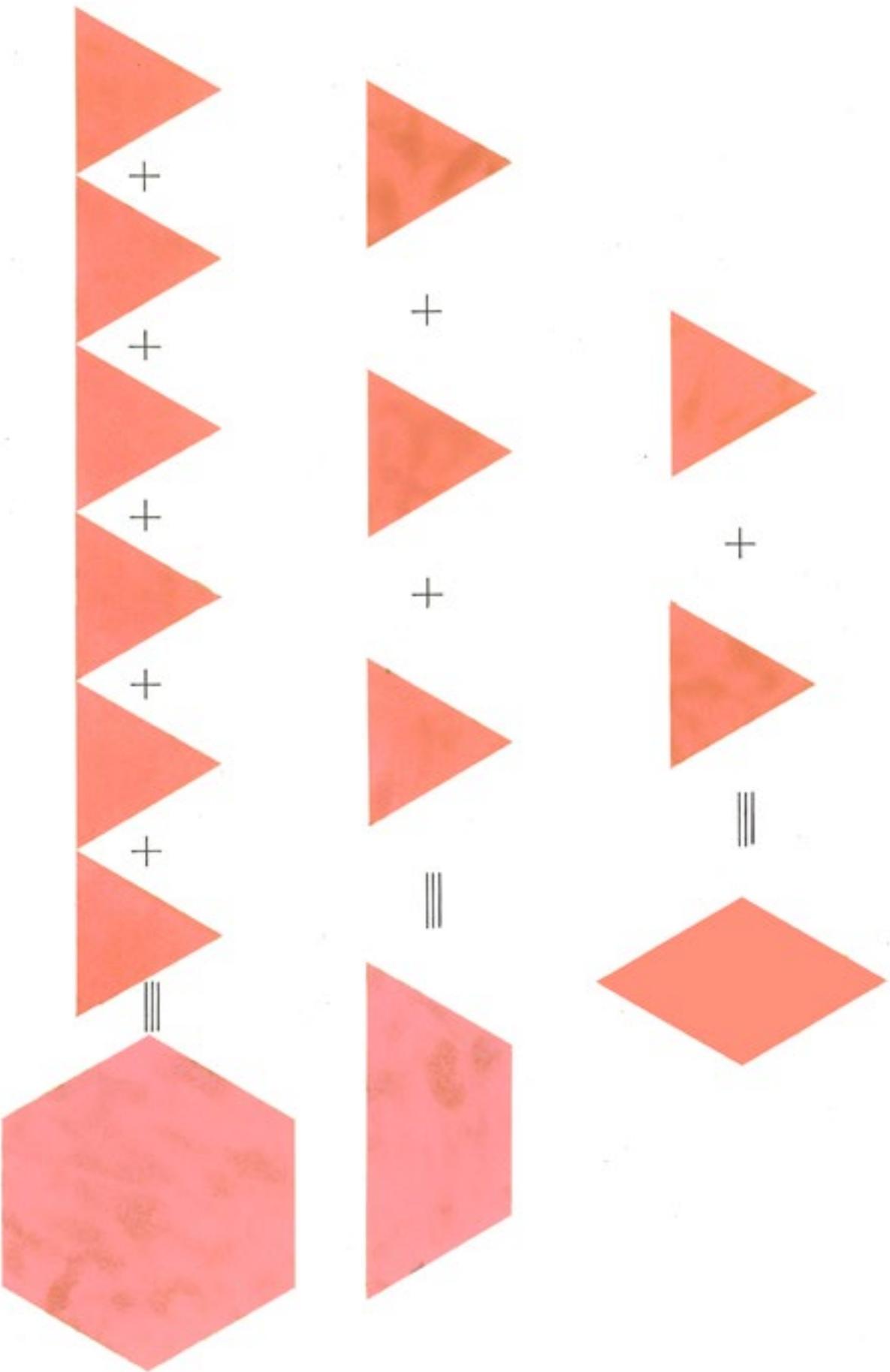
2nd Combination



Combinations

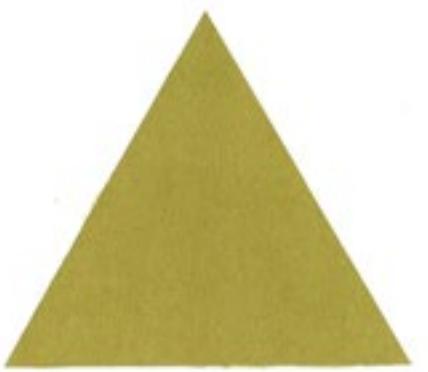


Combinations

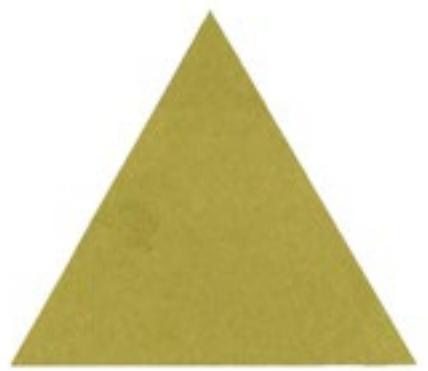


Verification of the relation between equivalent figures

Equivalences



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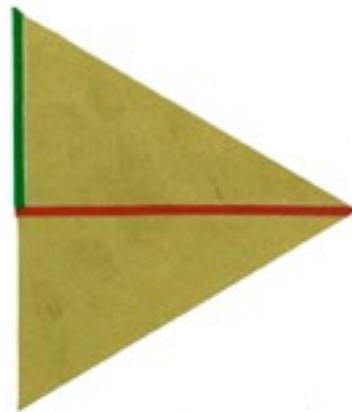
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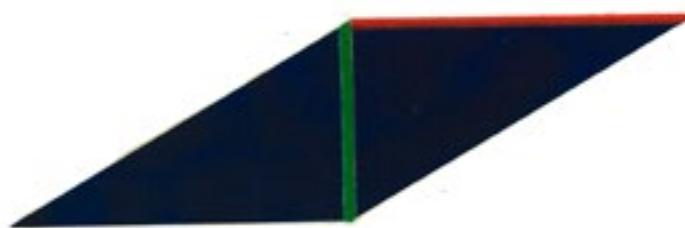
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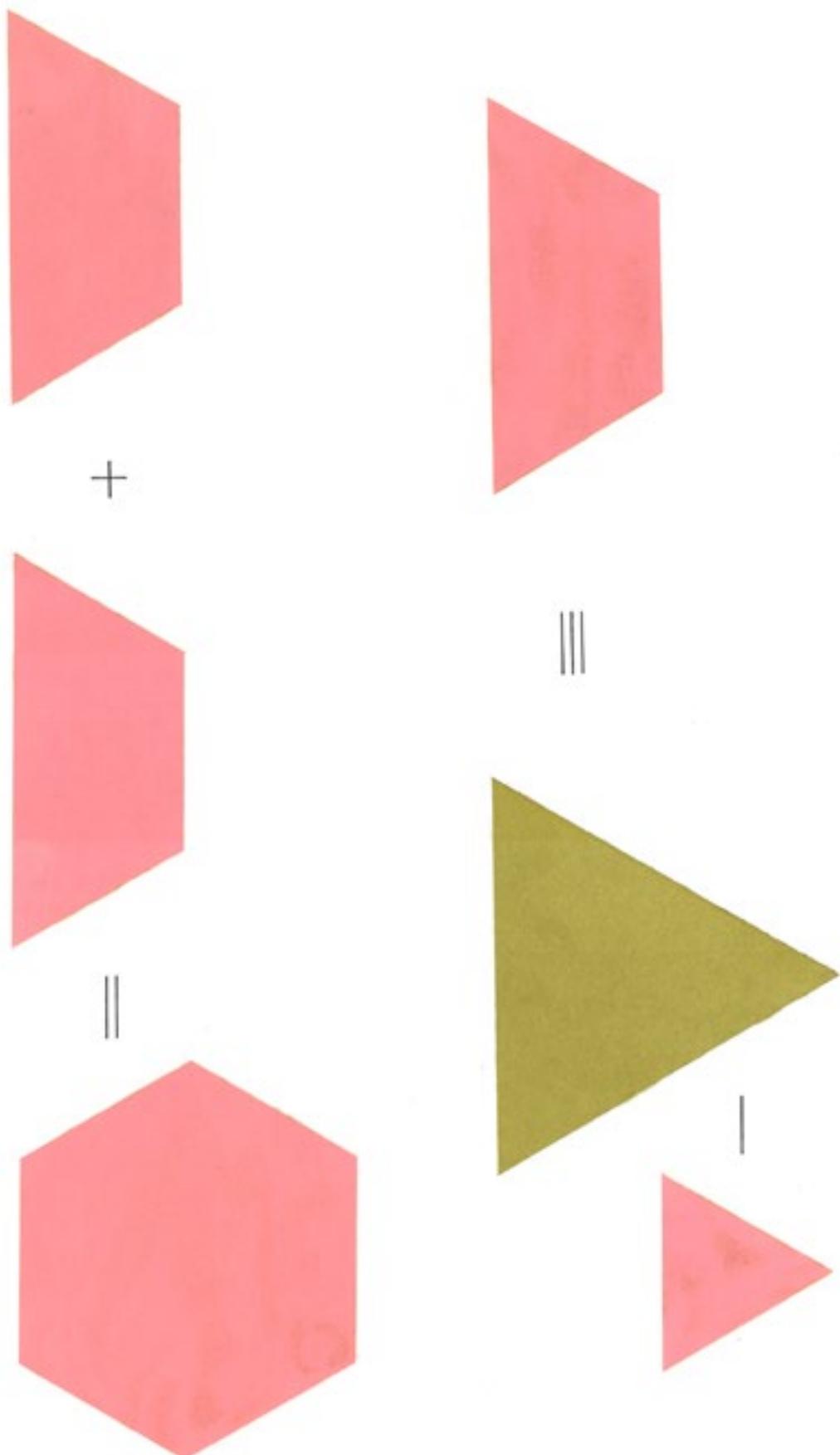
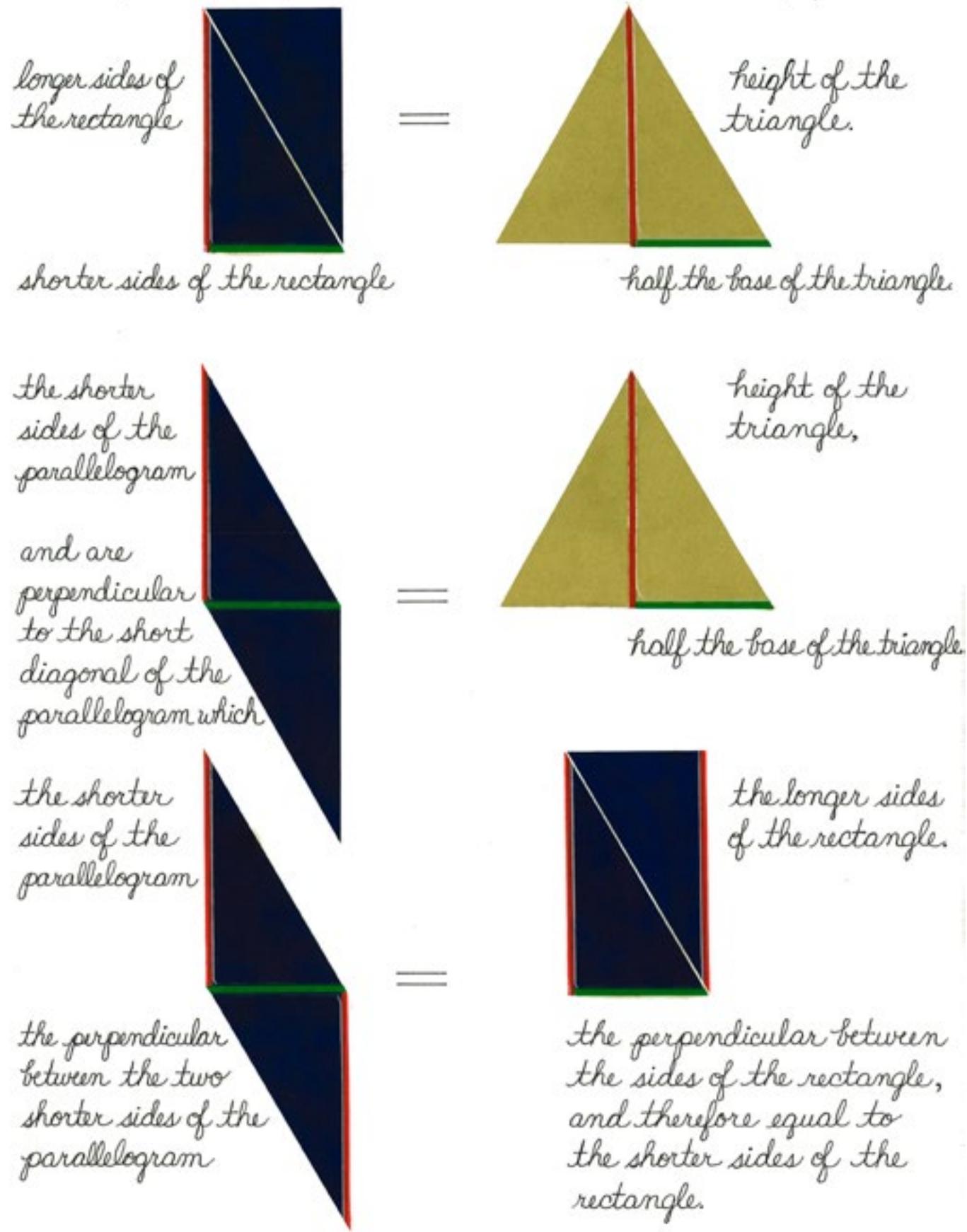


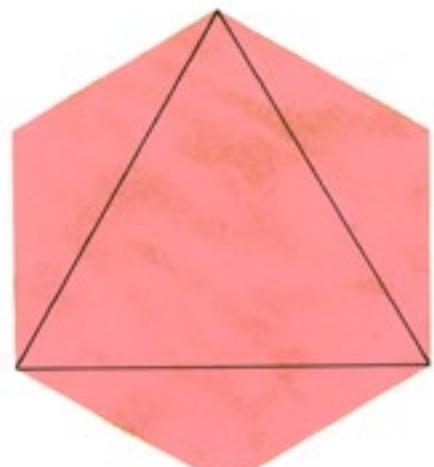
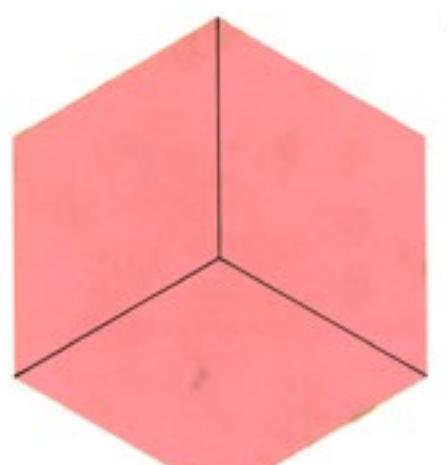
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Equivalences

Verification of the relation between equivalent figures.





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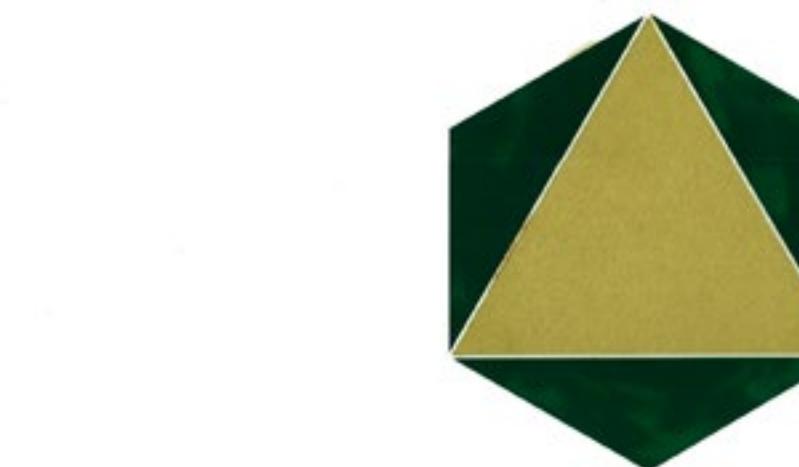
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Verification of the relation between equivalent figures



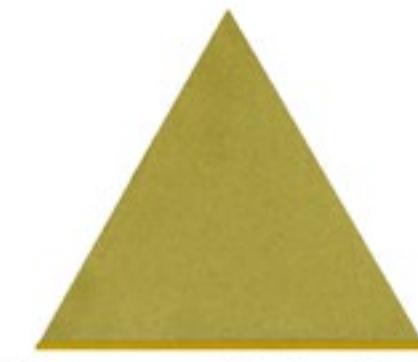
$$= \frac{1}{2}$$



The equilateral triangle is inscribed in the hexagon.

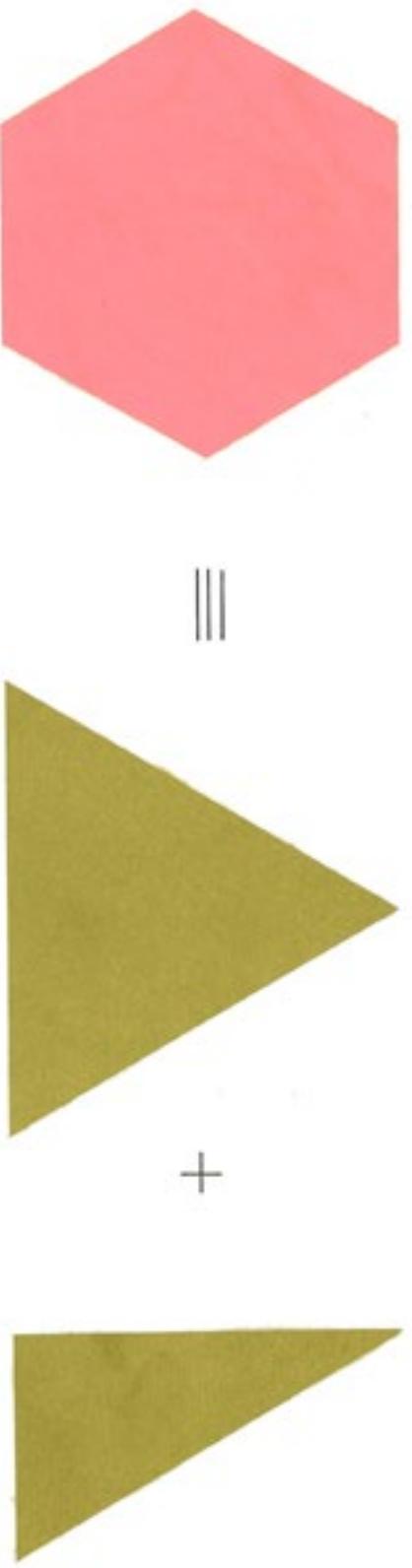


$$= \frac{2}{3}$$

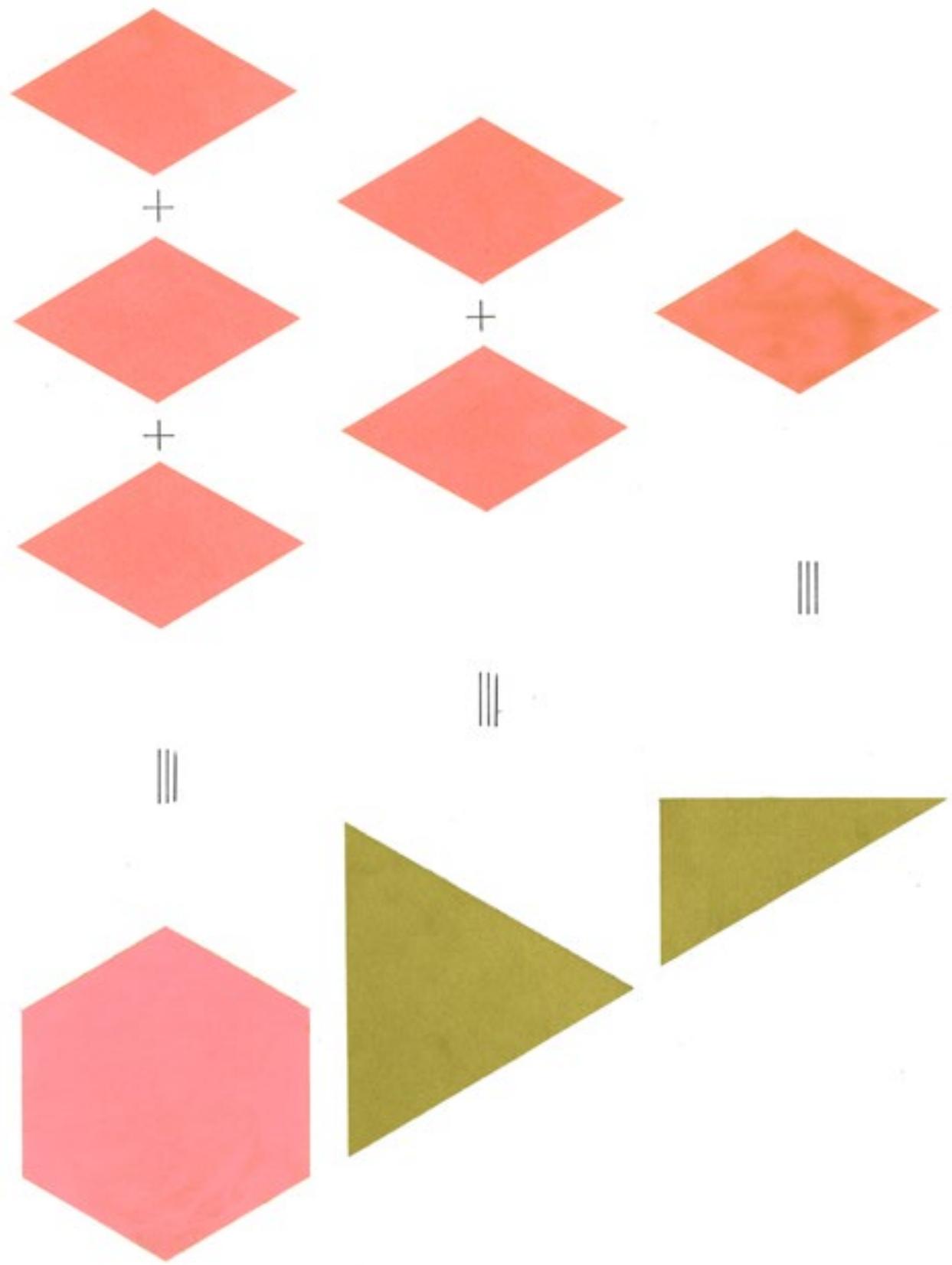


The longest diagonal of the rhombus is equal to the side of the triangle.

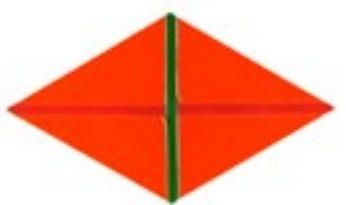
The hexagon is equal to the equilateral triangle (composed with $\frac{4}{5}$ of the hexagon) plus the right-angled triangle which is half of the equilateral.



Equivalence

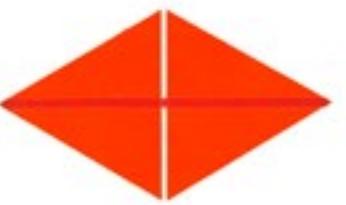


Identity of same lines in equivalent and non-equivalent figures



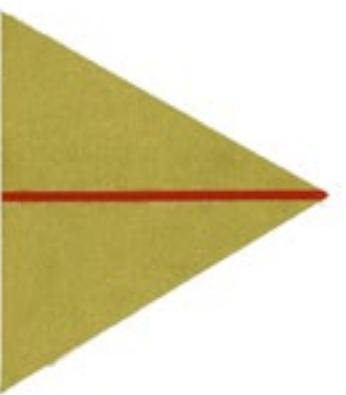
longer diagonal of the rhombus

shorter diagonal of the rhombus



longer diagonal of the rhombus

$=$



height of the triangle



longer cathetus of the triangle

shorter cathetus of the triangle