

Applications of Successive half turns in paper folding and paper cutting

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Received June 6, 2014

Abstract: The term 'half turn' is a geometric transformation as a function under which to each point on a plane a corresponding point. In geometrical transformation and construction many times the half turn is applicable. In the construction point of view it may be expressed as an equation of translation or half turn according to even or odd number of half turns. The main focus of this paper is to explore the importance of half turn which is highly applicable in our daily life for any geometric construction and Generalization of result of successive half turns.

Keywords: Half turn, Geometric transformation, product, folding, successive, origami, polygon, hexagon, circle, rectangle, strip.

General Background:

Mathematics is a practical art-science. Its practicality is to be developed in the form of arts. Paper folding and paper cutting is an effective subject matter on the field of artistry among various teaching arts.

The behavioral theories like read and understand, write and remember and do and know i.e. learning by doing and learning by observation are very effective in mathematics teaching. Therefore, the techniques like paper folding and paper cutting are adopted to make mathematics teaching more practical and to drive mathematics towards practicality.

By using waste paper, different types of mathematical models can be constructed and the same paper can be reused for multipurpose. It helps students to grasp mathematical concepts that the students themselves learn or the teacher, by using a paper, can easily demonstrate and teach complex mathematical concepts directly.

It is important to show concrete object to teach mathematical skill and concepts, for this, paper folding and paper cutting can be used as a special technique.

The learners love to play games, especially in the lower level, we can introduce paper folding and paper cutting as a special technique to teach mathematics in the