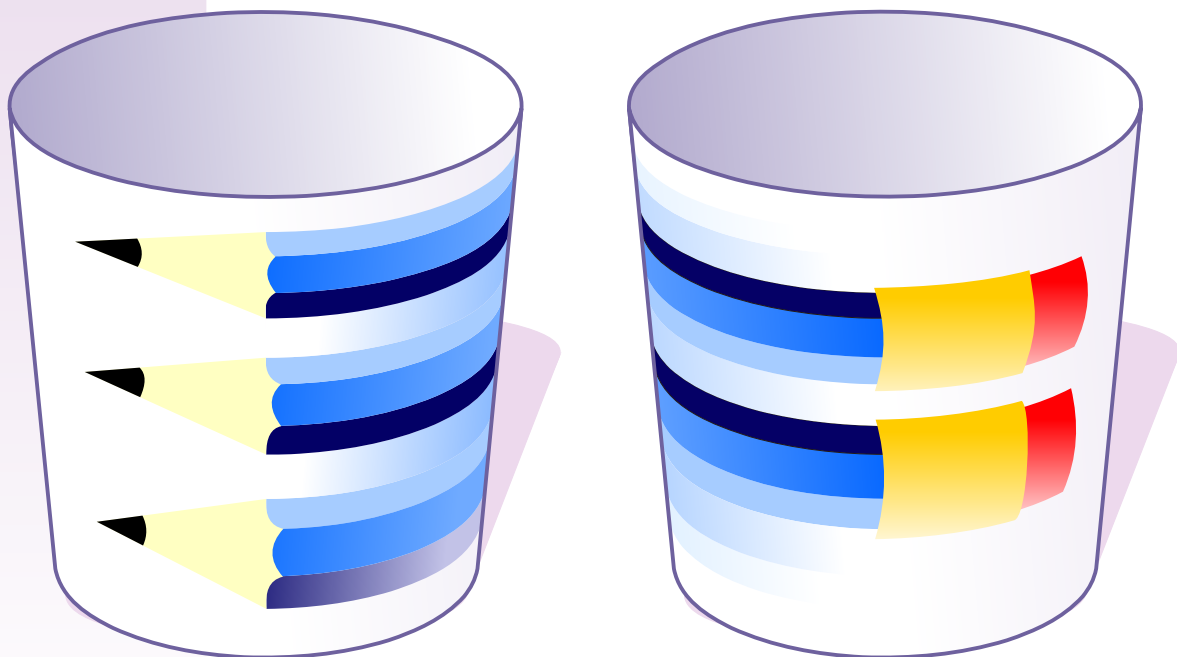


Treasure of Classic
and Modern Puzzles

Illusions



Pencil Illusion

by Serhiy and Peter Grabarchuk

Three pencils are drawn on the surface of a cylinder as shown in the left illustration above. When you rotate the cylinder clockwise you'll discover that the three pencils turned... into just too - as shown in the right illustration above. How this could happen?

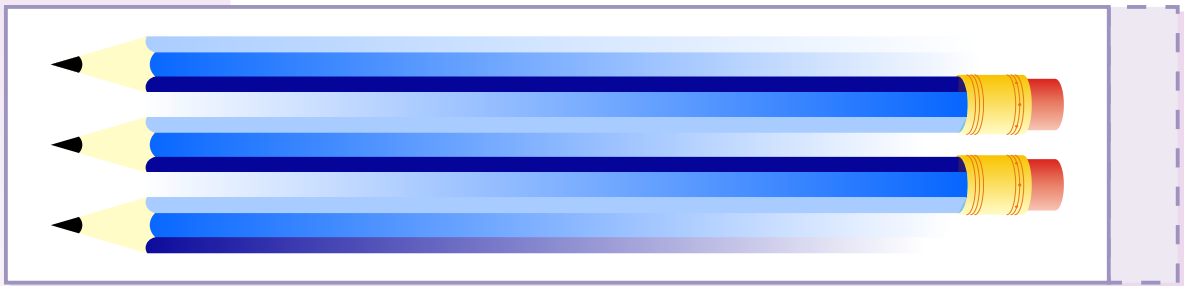
April 28, 2004

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Illusions



Pencil Illusion (explanation)

The illusion itself is based on a pattern that is drawn on the cylinder's surface. The pattern is shown in the illustration.

From this pattern it can be easily seen that the sides of each two pencils at the right are assembled of the sides of two its neighbors and a gap between them.

To produce the cylinder you may use its pattern shown in the last page of this file.

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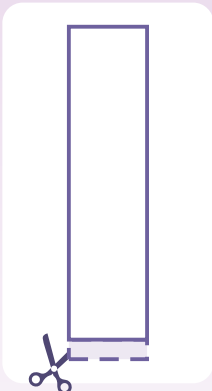
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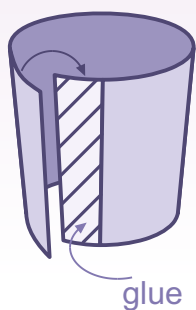
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Illusions

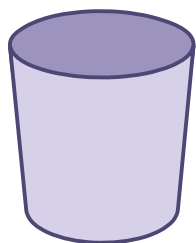
1



2

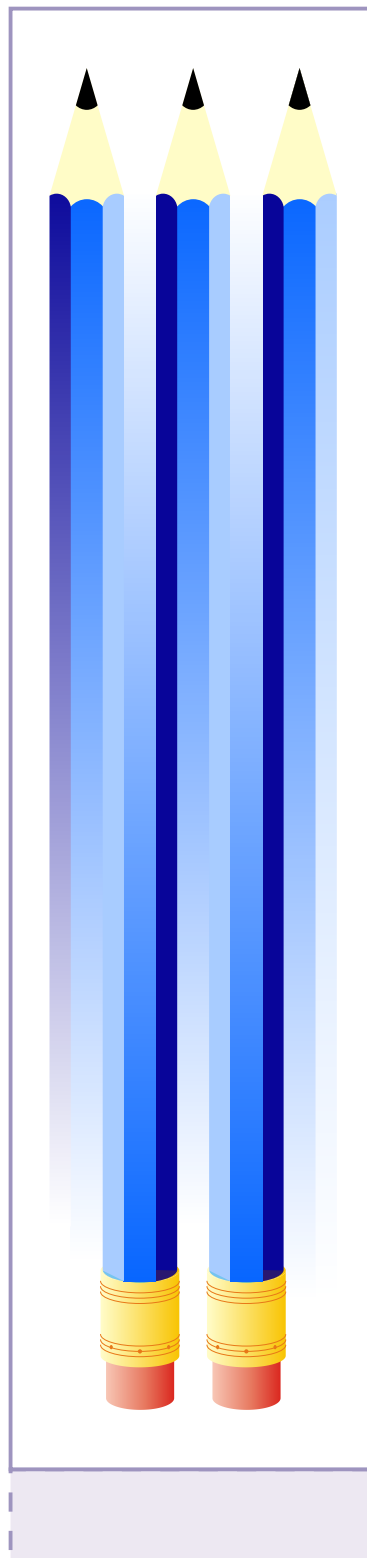


F



Pencil Illusion (pattern)

To produce the cylinder device first print its pattern out. Then follow the diagram shown in the left column above - from step 1 to step F (finish).



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