

game_TRANS

Solve the riddle.



Puzzle/quiz

Create triangles with two sides equal and base of two lengths.

When students create different triangles with two equal sides and the same base they should notice:

- the height of the triangles changes,
- the two angles at the base are always equal notwithstanding the change of the hight,
- the two angles at the base become "more open" as the height increases,
- the angle against the base becomes more and more sharp when the height rises.

The most important for students is to notice the dependencies between various properties. By manipulating the elastics on the geoboard, the students discover the properties of the triangles on their own, thus, they get a good basis for more difficult topics in geometry.

Puzzle/quiz

Create as many triangles as possible.

- 1. Every triangle has three vertices. The vertex (plural: vertices) is a corner of the triangle.
- $2. \ A \ base of a triangle is usually the one drawn at the bottom, but it can be any one of the three sides.$
- 3. The altitude of a triangle is the perpendicular from the base to the opposite vertex. There are three possible altitudes as there are three bases.
- 4. A triangle has three angles at each vertex.

There are several types of triangles, here there are some examples:

- two sides equal (isosceles);
- all sides equal (equilateral);
- no sides equal (scalene);
- right angled triangle (One angle 90°);
- obtuse (One angle greater than 90°);
- acute (all angles less than 90°).