Manual of drawing the Great Hug's Heart

1. **What will we be doing?** – The Heart must be the same in every place around the world, so that everyone has the same chances of winning the competition. Because of this, we have created one common scheme of drawing the Heart. Don't fear the threatening points and metered distances, it just looks hard, but really is straightforward! Generally speaking – we have to draw a rectangle, on which we'll paint two ellipses, which will create our Heart.

2. **How to prepare?**

   You will need 3 people, who need to have:

   - Chalk or something, with which you can easily draw on the ground, best in a comfortable and hard case
   - Inextensible cord (twine) 6,4 m long, with little loops on its ends
   - A long measuring tape at least 5 meters long
   - Large nails, that can be sticked into the ground. If it isn't possible to stick them in, instead of putting the loops on the nails, two people will hold the loops.

3. **Construction**

   Stage One – Making the rectangle, on which we'll draw the Heart

   - Mark on the ground point A, which will be in one of the bellies of our Heart. Next, in a straight line, measure 3,6 meters and mark point **B**. Everything is shown on **Pic. 1**
   - From point **B** measure 4,5 meters straight down and draw an assistant **F** point. Analogically do for point **A** and mark point **E (Pic. 2)**
   - Connect with a straight line point **E** and **F**. Later measure from each one 90 centimeters. There mark points **C** and **D (Pic. 3)**

   Stage Two – Drawing the Heart

   - Now is the end of the most mathematical part and time for the drawing. Two people stand in points **A** and **D**, stick nails in them or hold the ends of the cord by the loops. **(Pic. 4)**
   - The third person **stretches** the cord and begins to draw the first ellipse **(Pic. 5) ATTENTION!** We don't describe how you should move here, **see the video on our website!**
   - Draw the second ellipse in the same way, but the ends of the cord should be in points **B** and **C**.
   - A Heart gets created – you just have to erase the lines you don't need. Next we correct everything with white paint and we have our Heart!

Information for mathematicians: The Heart has **approximately** 20 sqaure meters (for specifics see the downoaldable file "Construction for mathematicians" [only in Polish] on our site).

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