

## 6 T-shirts

Author: Hajo Broersma (Universiteit Twente) Project: 4TU.AMI

## Challenge

33 pixies are standing in a circle. Each of the pixies is wearing either a red or a green T-shirt. If two pixies are direct neighbors in the circle, at most one of them is wearing a red T-shirt. If two pixies in the circle are separated by exactly 15 other pixies, at most one of the two is wearing a red T-shirt.

What is the largest possible number of pixies with a red T-shirt?



Artwork: Julia Nurit Schönnagel

## **Possible answers:**

The largest possible number of pixies with a red T-shirt is 7.
The largest possible number of pixies with a red T-shirt is 8.
The largest possible number of pixies with a red T-shirt is 9.
The largest possible number of pixies with a red T-shirt is 10.
The largest possible number of pixies with a red T-shirt is 11.
The largest possible number of pixies with a red T-shirt is 12.
The largest possible number of pixies with a red T-shirt is 12.
The largest possible number of pixies with a red T-shirt is 13.
The largest possible number of pixies with a red T-shirt is 14.
The largest possible number of pixies with a red T-shirt is 14.
The largest possible number of pixies with a red T-shirt is 15.
The largest possible number of pixies with a red T-shirt is 15.