Nederlandse Wiskunde Olympiade voor Bedrijven

Friday, 28 January 2022

- Available time: 20 minutes.
- For this “uitsmijter” only an answer is required, no calculation or proof. A correct and complete answer is worth 10 points. For an answer that is not complete or not completely correct you may also get some points.
- Formula sheets and calculators are not allowed. You can only use a pen, compass, ruler or set square and of course your mental skills.
- Good luck!

For the contest managers:

Score first round: Score uitsmijter:

Name:

Company:

Uitsmijter

A palindrome number is a positive integer which reads the same backward as forward. A number never starts with the digit 0. For example, the numbers 3, 15351 and 153351 are palindrome numbers, but 30 and 030 are not.

Find all palindrome numbers $n$ such that $n + 2022$ is also a palindrome number.

Answer: