MATHCOUNTS® Problem of the Week Archive

One for the Ages – January 22, 2024

Problems

Cara was born on January 1, 2010, and her mother, Sydney, was born on January 1, 1982. In what year will Sydney's age be twice Cara's age?

In 2018, Cara's brother, Nile, celebrated a birthday on January 4th. Cara's age at that time was 4/5 Nile's age at that time. How old was Nile's mom, Sydney, when he was born?

The sum of the ages of Cara, Nile and Sydney each year forms an arithmetic progression. The sum of their ages in 2018 was 54. In what year will the sum of their ages be 78?