

SIX CLASSIC FAMILY AND AGE PUZZLES, WITH ANSWERS

EASY TO HARD

6 PUZZLES

ANSWERS INCLUDED

Who is related to whom, how old is everyone, and who gets what. Six puzzles about families, starting easy and finishing hard. They come from Amusements in Mathematics by Henry Ernest Dudeney, published in 1917, in his own words.

NO. 1 · EASY

HEARD ON THE TUBE RAILWAY

First Lady: "And was he related to you, dear?"

Second Lady: "Oh, yes. You see, that gentleman's mother was my mother's mother-in-law, but he is not on speaking terms with my papa."

First Lady: "Oh, indeed!" (But you could see that she was not much wiser.)

How was the gentleman related to the Second Lady?

In plain English: Two women are talking on a London Underground train. How is the man they are talking about related to the second woman?

NO. 2 · EASY

MOTHER AND DAUGHTER

"Mother, I wish you would give me a bicycle," said a girl of twelve the other day.

"I do not think you are old enough yet, my dear," was the reply. "When I am only three times as old as you are you shall have one."

Now, the mother's age is forty-five years. When may the young lady expect to receive her present?

NO. 3 · MEDIUM

MRS. TIMPKINS'S AGE

Edwin: "Do you know, when the Timpkinses married eighteen years ago Timpkins was three times as old as his wife, and to-day he is just twice as old as she?"

Angelina: "Then how old was Mrs. Timpkins on the wedding day?"

Can you answer Angelina's question?

NO. 4 · MEDIUM

THE BAG OF NUTS

Three boys were given a bag of nuts as a Christmas present, and it was agreed that they should be divided in proportion to their ages, which together amounted to $17\frac{1}{2}$ years. Now the bag contained 770 nuts, and as often as Herbert took four Robert took three, and as often as Herbert took six Christopher took seven. The puzzle is to find out how many nuts each had, and what were the boys' respective ages.

In plain English: The nuts are shared out in the same proportions as the boys' ages. For every 4 nuts Herbert takes, Robert takes 3. For every 6 Herbert takes, Christopher takes 7. How many nuts does each boy get, and how old is each one?

NO. 5 · MEDIUM

A LEGAL DIFFICULTY

"A client of mine," said a lawyer, "was on the point of death when his wife was about to present him with a child. I drew up his will, in which he settled two-thirds of his estate upon his son (if it should happen to be a boy) and one-third on the mother. But if the child should be a girl, then two-thirds of the estate should go to the mother and one-third to the daughter. As a matter of fact, after his death twins were born, a boy and a girl. A very nice point then arose. How was the estate to be equitably divided among the three in the closest possible accordance with the spirit of the dead man's will?"

In plain English: The will says: if the baby is a boy, he gets two-thirds and his mother one-third. If it is a girl, her mother gets two-thirds and she gets one-third. Twins arrive, one of each. What is the fairest way to share it?

NO. 6 · HARD

A MIXED PEDIGREE

Joseph Bloggs: "I can't follow it, my dear boy. It makes me dizzy!"

John Snoggs: "It's very simple. Listen again! You happen to be my father's brother-in-law, my brother's father-in-law, and also my father-in-law's brother. You see, my father was..."

But Mr. Bloggs refused to hear any more. Can the reader show how this extraordinary triple relationship might have come about?

In plain English: John tells Joseph that Joseph is three things to him: his father's brother-in-law, his brother's father-in-law, and his father-in-law's brother. How can one man be all three?

All six are from [Amusements in Mathematics](#) (1917), which is in the public domain. The worked answers are our own.