

Problem 6

A well-known nursery rhyme starts as follows:

“As I was going to St. Ives
I met a man with 7 wives.
Each wife had 7 sacks.
Each sack had 7 cats.
Each cat had 7 kittens...”
How many kittens did the traveler meet?

Solution

By the principle of counting, there are

$$1 \times 7 \times 7 \times 7 \times 7 = 2401$$

kittens.