

Martin Gardner would sometimes wrap puzzles inside stories he concocted, such as with the book "The Numerology of Dr. Matrix." The following puts my favorite puzzle in that tradition:

The Accountant

by Barney Sperlin

Richard rapped on the Captain's door and heard a faint welcome from inside. He swung it open to find his boss looking up from behind stacks of papers and file folders. The small office reminded him of a university faculty suite, rather than a police precinct.

Richard shut the door quickly and strode up to the front of the desk. "I think we're in, sir!"

Captain Marlow frowned from behind his half-rim glasses. He glanced at the thin, bookish appearance of this new addition to his team. "You sold it?"

Richard thought the squeaking and cracking he heard could have come from the chief's chair or the elderly man's back. "Is this my future?" he wondered. Was the Captain 80? 90? Well, everyone over 50 looked the same.

"Bought the whole act!" smiled Richard. "It looks like I get into the guts of their racket by the end of this week. My interview knocked 'em out!"

Marlow grunted quietly. "Grab that chair. You're from Cranbury, right?"

"Graduated last May and joined their task force in June. They said you needed someone down here who could handle numbers." He talked as he noisily slid the chair over the bumpy floorboards, and sat. "This operation's going to be smooth and clean."

"Well, kid, that crime family you're getting embedded into ain't clean." Marlow leaned back. "Tell me how you did it."

"They gave me a test and I convinced them that I was really good with numbers, so I should be starting as an apprentice accountant sometime soon."

"A test? What kind of a test? I always hated tests."

“It was strange. Sergio, a lieutenant of the Antipasto family, put four blue velvet bags on the desk in a line in front of him. They were small and had a gold-colored tie at the top of each.

Richard continued. “He said 'Boy, how many jewels in each bag?' Well, I shrugged 'cause I couldn't see into the bags. But I knew he was interested in my math abilities, so I asked him, 'Are there a hundred jewels altogether?’”

“Less,” he said.

Marlow, who was always impressed with people who could do math, though he never tried to learn it himself, asked, “And that's when you told him how many were in each bag.”

“Well, no. I kept whittling the total down: 50, 20, 18. Each time he said, 'Less.' Finally, he spit out, 'Enough of this crap.' It was gross. He really did spit! Anyway, then I asked him if all the bags had the same number of jewels, and he said, 'No, they're all different.’”

Marlow nodded and muttered, “And that's when you told him how many were in each.”

“Well, no, it was still too hard a problem, so I asked if I could write down some stuff. He agreed, and I did some calculating on a pad I always carry. I asked, ‘if you tell me what the four numbers multiplied together were, would it help?’ He scribbled on his desk calendar for a short time, and said ‘no’ and then laughed, telling me the product anyway.”

“And that's when you ...”

“That would've been cool, but no. I had one more question and I was nervous. He *had* to answer it.”

“You asked him where the bathroom was.”

“I may have been getting close, but I asked if there was more than one jewel in the bag with the least.”

“And he said?”

“Well, as soon as he answered my question, I told him how many were in each and he told me I could start Friday.”

“Good, good.” Marlow leaned forward and put his elbows on the desk. “I knew you were the man for the job. By the way, how many were in each?”

Richard leaned forward, as Marlow had, but with an infuriating smirk. “I’ve told you everything you need to know. You can figure it out. But, there IS something I don’t know.”

Marlow raised his eyebrows without saying anything, resting his chin on his hands.

Richard’s grin faded. “Was there ever really anything in those bags, or was it all hypothetical? Maybe I ought to break into Sergio’s office when I’m there and check ‘em out.”

Marlow erupted out of his chair and leaned toward Richard. “The hell! You’ll get killed. You stick to accounting. That’ll give us all we need.”

Richard’s eyes drifted toward the ceiling and his face became blank. “I’ll need to pick the locks on the doors and desks, and then break the combination on the safe. And a jetpack on the roof in case I gotta’ get out fast. And ...”

Marlow sat back down, grabbed the phone and punched the button for his secretary. “Another James Bond wannabe. Lock picking. Ha! Safe cracking. Ha! Ada, get Richard Feynman’s file. He’s fired! And, let’s talk to that Gardner guy.”

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Inspired by: The Scientific American book of Mathematical Puzzles and Diversions, Martin Gardner, Simon and Schuster, 1959, p. 114

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Hints

You’ll need to write down all the possibilities, including their products. Not as hard as you might think.

Note that Richard couldn’t identify the 4 digits even when he heard the product, so eliminate number combinations which gave a product only existing for the one combination.

Of those remaining, his final question allowed him to answer, even though we don’t

know what Sergio said. If Richard still couldn't have answered at that point, there would have had to have been more questions.