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Curator's note: this story apparently predates the destruction of Europe by the armies of the East. Whether the young woman introduced at the end of the story is the same Eastern queen who personally supervised the assault on Paris is still a matter of debate among scholars.

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There once lived three princesses, began the report.

The man closed the folder. He sat in a heavy oak chair that was nailed to the deck of the sailing ship. They were two days out of Knossos, due to arrive in the Allied East before sundown.

He opened the folder and started reading again. There once lived three princesses. The man noted the illustration on the facing page. The eldest was Bernadette, who loved to count. She built castles just by counting -- the higher the numbers, the taller the towers. The middle sister was Lisa, the artist. She drew castles on fine paper. They were all beautiful, each an improvement on the last. The youngest was Maxine, who always carried a shovel, and whose fingers were caked with dirt. Maxine dug rocks out of the ground and piled them up...

The man thought to himself: *Then one day, a prince came to town*. This particular prince, seated in his heavy oak chair, was already married. He was traveling to identify a suitable candidate for a scientific position at the Imperial university outside Paris.

The mission was a military one. The previous year, a score of Norsemen had wreaked havoc on the port of Antwerp. That was not all. The Rus were on the march again, and there were (unconfirmed) reports of Berbers on Mallorca near Spain. Military matters were much on everyone's mind. Imperial security had to tighten. Citizens of Europe lived in fear of Norse berzerkers, and they whispered to each other: Were there really Berbers on Mallorca near Spain?

The prince's ship arrived safely. He found the princesses and introduced himself. They were all quite beautiful. They knew who he was, as did everyone. The prince checked into his quarters and slept soundly.

* * *

The next day, he found Bernadette walking along a path.

He said, "Bernadette, I'm told you like to count."

"Yes, it's so," she replied. Bernadette's black eyes stared into the distance when she talked.

"How many sheep are on that hill?" he asked.

"Thirteen and a half," she said.

"A half?"

"Yes," she said, "there is one animal that I cannot quite make out. It is either a baby sheep or a large sheep-dog. So I count it as half a sheep and half a dog."

"Thirteen and a half sheep, plus half a dog. So, fourteen animals in all," said the prince.

"Plainly," said Bernadette. "It's simple fractional counting."

A woman's voice called out, "Sister, come over."

The prince recognized Maxine. She was half buried in dirt, and there were vast numbers of rocks piled nearby. She had wild hair and a pretty, round face.

"Sister, my pile of rocks is large," she said, "but I don't know if it's enough for a castle. Can you tell me how many rocks I have?"

Bernadette sighed. "Count the rocks that touch the ground and multiply that number by its own square root, then divide by three."

"But the rocks on the ground are underneath others. How can I count them?" asked Maxine. She frowned at the rocks, contemplating having to move so many off the top, just to count the ones at the bottom.

"Then count the rocks that lie around the edge of the base," said Bernadette. "Square that and divide by four times pi."

"What's four times pi?" asked Maxine.

"About 12," said Bernadette.

"Why didn't you say so?" said Maxine, wiping her brow. She scribbled down the information and clipped it to her bra strap.

Bernadette said, "There's a lot more I could teach you, Maxine." She shifted her weight to her other hip.

"I'll ask when I need it," said Maxine. "Look, why don't you give me a hand?"

"It doesn't look like fun," said Bernadette.

"Not supposed to be fun!" said Maxine, smiling. "Come on, grab a shovel."

Bernadette stood her ground.

"Pretty rocks!" said Maxine.

Lisa, the middle sister, walked up and joined them. She was fair, and curvy.

The prince asked her, "What do you make of all this digging, Lisa?"

"I don't like digging for rocks," said Lisa. "It's not interesting, or fun."

"It's not fun for me either," Maxine called, from inside her hole.

"So why do it?" asked Lisa.

"No idea!" said Maxine.

The prince was much interested in this.

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The prince pored over Lisa's castle drawings. Can it be built? he wondered. Very heavy stone would be needed for some of the cantilevers to work. Does such stone exist? Are there methods of lifting it into place? He tried building three-dimensional models, but the edges didn't line up. Would the main gate sustain a Norse attack? The specifications were as elusive as the alleged Berbers on Mallorca near Spain.

While he fiddled with the drawings, Lisa drew pencil sketches of the prince. The prince glanced at one of them.

"That isn't quite how I imagine myself," said the prince.

"How do you imagine yourself?" asked Lisa.

"Hmm," replied the prince.

Lisa offered commentary on her drawings. She liked to quote opinions from her teachers. She knew art, and she knew history. She spoke of minimalism. She was good at backgammon, a fast and intuitive player.

* * *

The prince and Bernadette had their own sessions. The first few minutes of discussion were always easy and straightforward: *assume we have a castle made of a single stone*. But soon enough, the prince would find himself hopelessly adrift in formulae, with Bernadette sailing on ahead, gleefully and incomprehensibly.

Unlike Lisa, Bernadette never quoted the opinions of her teachers. Their names were simply bolted onto various theorems and algorithms. If her teachers had opinions, they kept them to themselves.

* * *

The prince attended state balls. He stuck to the corners of the room. Women may have been interested in him -- it was hard to tell. The customs of the East were different.

At one such party, he watched Lisa and Bernadette carefully avoid each other as they maneuvered around the room. At the bar, he asked Lisa about this.

"What's to talk about?" said Lisa. "Bernadette's counting is tedious and distracting. One can count anything. Even if the castle in Tyre is made of 93,000 stones, so what? What does that say about the true nature of castles?"

Maxine was sitting on a nearby barstool. The prince saw her write on a napkin: "93,000."

* * *

Maxine preferred to meet at the rock pile. That way, she could get things done while they talked. Maxine had two stock answers to the prince's questions. To some questions, she would reply, "Look, I'm no philosopher. But here's how I would do it..." To other questions, she would say, "I already tried that. It doesn't work."

The prince noticed that Maxine often put wooden logs at the base of the rocks. Maxine explained that the logs kept water from flowing under the rocks. The prince wrote down: *Logs prevent underflow*. The prince could see that Maxine's knowledge continually grew in all directions, and her muscles grew strong from digging. Her mind was quick and practical.

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Letters arrived from Paris. Fortifications were breached, Imperial ships sunk in their own harbors. The prince needed to wrap things up.

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As he walked with the three princesses in the garden, the prince talked about the costs of things. Of equipment and operations. *Scaling up*, he called it.

"How can we scale up?"

Neither Lisa nor Bernadette understood the question. Maxine only said, "Look, things are getting better, and they will continue to get better." This was, of course, no answer at all. But the prince was not concerned. To the northwest, there were other tribes where he might find expertise in business and professional management.

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In the end, the prince chose Maxine. He judged her both practical and curious. She sought widely for what she needed. She applied new knowledge with vigor, and without self-consciousness, like a child trying out new words.

The prince sent Maxine off to Paris with a letter of introduction and a French dictionary. He pictured her walking through a Parisian hardware store, her finger running down the lines of the dictionary.

* * *

The prince spent his last day wrapping up his affairs. In the late afternoon, he poured himself a cup of coffee and took it to the ridge overlooking the rock pile. Looking down, he saw a young woman inspecting the rocks, a light shovel in one hand, sketches in the other. The prince recognized her. She was a pupil of Lisa's. The woman looked up at him. After a silent moment, the prince turned to walk away.

"Hey!" she said. "Come here!"

The prince was surprised by the woman's directness. He walked down to where she was.

"You're the guy everyone's afraid of," said the young woman.

"Hmm," said the prince.

The woman squinted, appearing to size him up. She was wiry and dark, and sexy. Jumpy.

"Listen, I've got this idea," she said.

She described a plan for covering a large, flat area with rocks, creating a solid base. She had some old drawings, and on the back of one were some scribbled equations. The prince watched as the woman outlined fortifications and gardens. There were barracks stacked above stables. There were inner walls and outer walls. There were armored repositories of tools ... sledgehammers, pit-saws, crowbars. It was all sketched out.

There were gatehouses with murder holes for pouring hot oil. Vertical slits were cut into the outer walls, through which arrows would be fired. *Flaming arrows*, thought the prince. He chuckled to himself. He was getting into it.

The young woman said that people would marvel at these constructions. As she spoke, she pointed at this rock and that.

Soldiers could disassemble the structures, and reassemble them elsewhere. Roads would connect the multiple installations. There would be check points on the roads, where messengers would meet, to exchange enciphered texts.

The woman talked and talked.

The prince listened, and he looked at the sketches. They looked interesting and plausible, though clearly, she had produced nothing yet.

The prince took note of the setting sun. His ship was waiting.

When she finished talking, they stood in silence.

"Good luck, kid," he said, finally.

The prince trudged up the hill. When he reached the top, he looked back.

"Pretty rocks!" the young woman called.

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