SARAH GLAZ

## Archimedes

It is difficult to find a present for a man who has everything,

      and he has everything of value—his mathematical imagination.

One day at the agora, I met a friend who promised to make the introductions.

      She believed that in spite of his wisdom he was missing something important.

I guessed what it was when I saw the way she lowered her head to listen

      to her child, the way her eyes lit up when she caught a glimpse of

her husband's pallium fluttering behind a column of the temple of Apollo.

      She meant well. I reached fourteen years of age and my father was anxious

for me to be married, the clothes already spun by my mother, the dowry ready.

      But the gods have conspired to prevent our meeting. The Romans attacked

and he was recruited to construct defensive war machines. After the Roman army

      lost the battle—his ingenious weapons *inflicted a great slaughter among*

*them*—the protracted siege has begun. When will it end?

      There are so many rumors about his mathematical prowess:

It is said that he invented a screw pump, as a young boy in Alexandria.

      As a lad of twenty-two, he determined the alloy of King Hieron's crown.

How I laughed when my parents told me the story of his running stark-naked

      through the streets of Siracusa shouting: *Eureka! Eureka*!

He designed a lever that can move the earth.  He devised a way to measure the area

      of any circle, the surface area of every sphere and even its volume.

A cylinder circumscribed about a sphere—what a marvelous thing to behold!

      And grains of sand by the myriad, *one thousand units of the seventh order*

*of numbers*, fill the spherical shape of our universe where stars and planets revolve

      in concentric circles around a still and centered earth.

Foremost on my mind are these lovely abstractions. I wish I could wed his

      mathematical learning. Be the bride of postulate and proof, area and

volume, sand reckoning and stars. Different from other men, he might

      accept me as a gift on these terms—after the siege.

*Note*: Archimedes (287–212 BCE), Greek mathematician, physicist and engineer—a leading scientists of classical antiquity—is considered to be one of the greatest mathematicians of all time. His mathematical work anticipated Calculus in both its results and original methods of proof. His achievements in physics include founding hydrostatics and discovering the principle of the lever. He is credited with designing innovative devices, including defensive war machines to protect his native Syracuse—a Greek city situated in Sicily—from Roman invasion. Archimedes was killed by a Roman soldier at the end of the Siege of Syracuse. Text in italics in lines 12-13 is from Plutarch's *Life of Marcellus*, and in lines 22-23 from Archimedes' *The Sand Reckoner*.