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# Mathematics in Ancient Greece



#### STATE STANDARDS MA.7.A.1.1–6 MA.7.G.2.1–2 MA.7.A.3.1–4 MA.7.G.4.1–4 MA.7.G.4.1–4 MA.7.S.6.1–2 MA.7.S.6.1–2 MA.7.P.7.1–2

# Getting Started

The ancient Greek period began around 1100 B.C. and lasted until the Roman conquest of Greece in 146 B.C.

The civilization of the ancient Greeks influenced the languages, politics, educational systems, philosophy, science, mathematics, and arts of Western Civilization. It was a primary force in the birth of the Renaissance in Europe between the 14th and 17th centuries.



**Essential Question** How do you use mathematical knowledge that was originally discovered by the Greeks?

**Sample:** Ancient Greek symbols for the numbers from 1 through 10 are shown in the table.

				ſ	ΓI	ΓII	ΓIII	ΓΙΙΙΙ	$\triangle$
1	2	3	4	5	6	7	8	9	10

These same symbols were used to write the numbers between 11 and 39. Here are some examples.

 $\triangle \cap ||| = 18$ 

- $\bigtriangleup \bigtriangleup \bigtriangleup \Gamma = 35$
- $\triangle \triangle |||| = 24$



Alexander the Great



Parthenon



## Things to Include

• Describe at least one contribution that each of the following people made to mathematics.

Pythagoras (c. 570 B.C.-c. 490 B.C.)

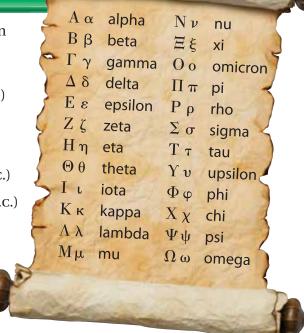
Aristotle (c. 384 B.C.–c. 322 B.C.)

Euclid (c. 300 в.с.)

Archimedes (c. 287 B.C.-c. 212 B.C.)

Eratosthenes (c. 276 B.C.–c. 194 B.C.)

- Which of the people listed above was the teacher of Alexander the Great? What subjects did Alexander the Great study when he was in school?
- How did the ancient Greeks represent fractions?



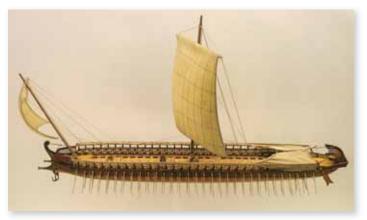
• Describe how the ancient Greeks used mathematics. How does this compare with the ways in which mathematics is used today?



Greek Pottery

### Things to Remember

- Add your own illustrations to your project.
- Try to include as many different math concepts as possible. Your goal is to include at least one concept from each of the chapters you studied this year.
- Organize your report in a folder, and think of a title for your report.



Trireme Greek Warship