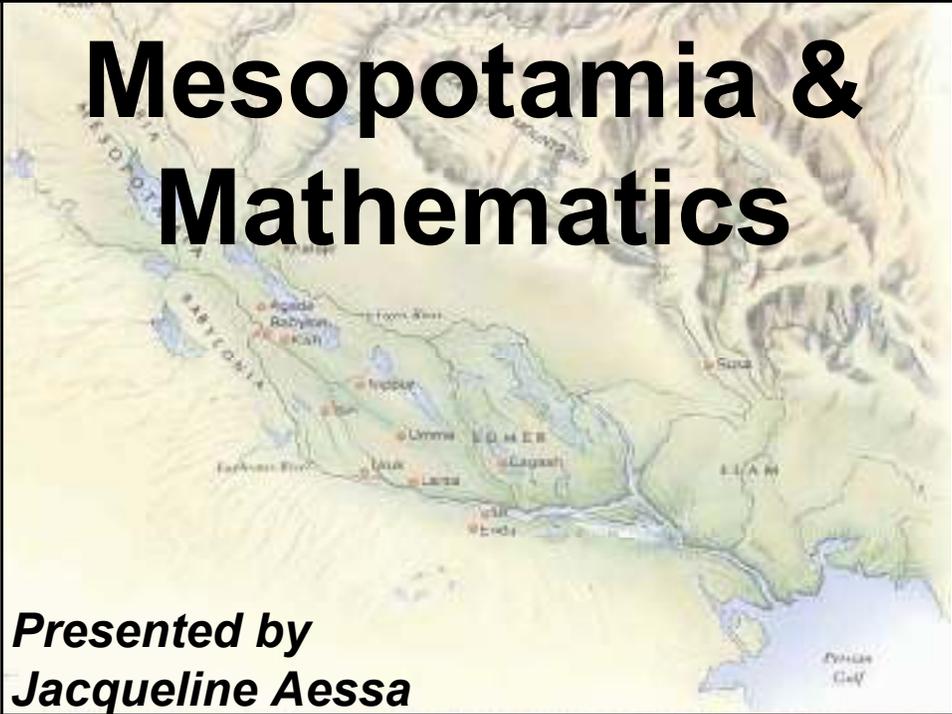
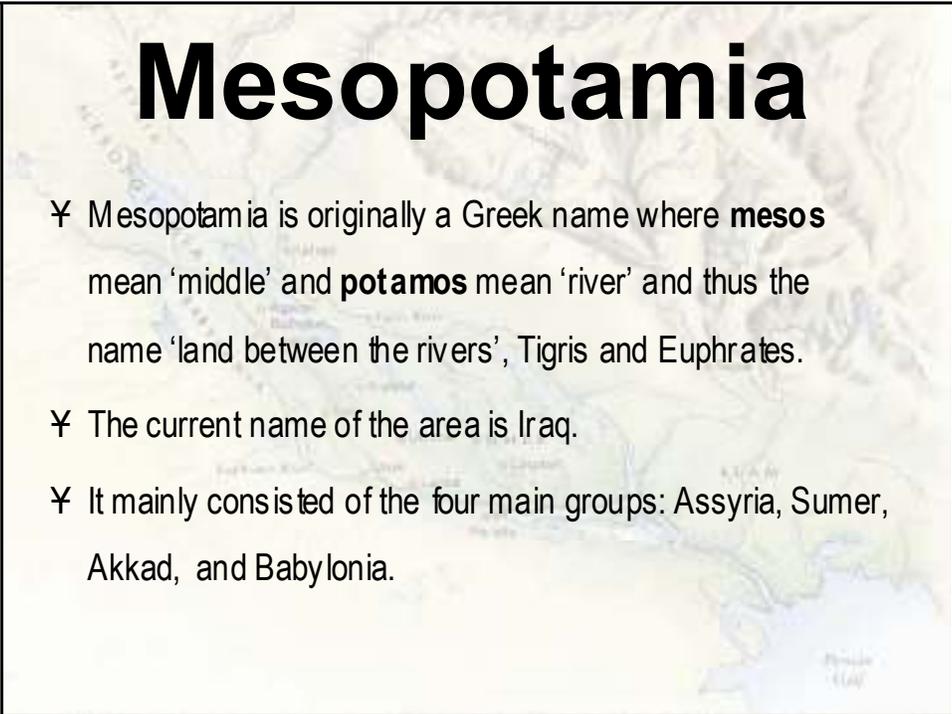


Mesopotamia & Mathematics



*Presented by
Jacqueline Aessa*

Mesopotamia



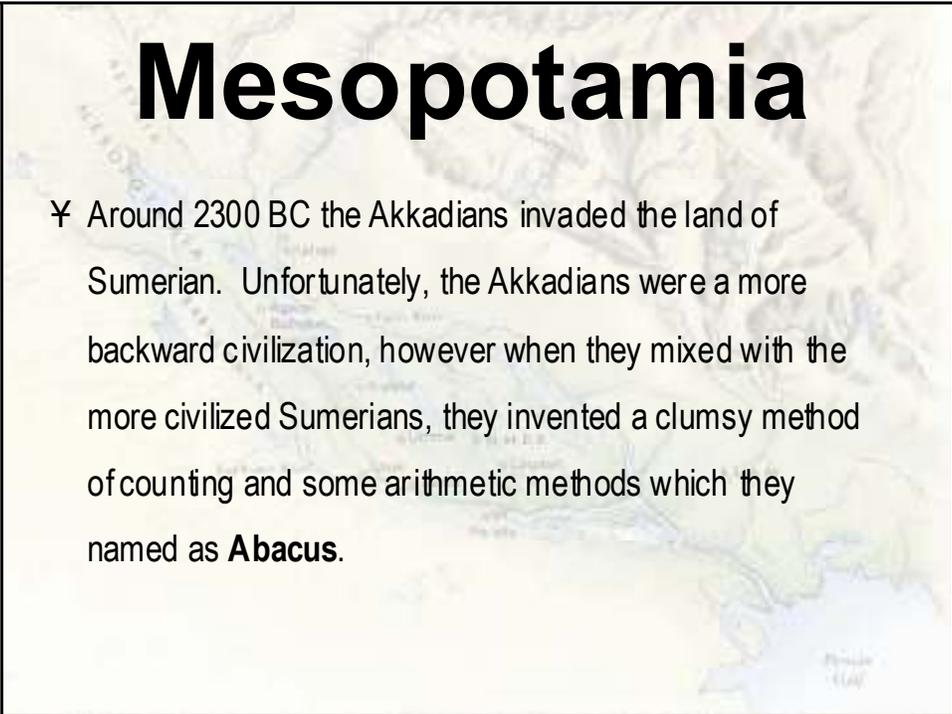
- ¥ Mesopotamia is originally a Greek name where **mesos** mean 'middle' and **potamos** mean 'river' and thus the name 'land between the rivers', Tigris and Euphrates.
- ¥ The current name of the area is Iraq.
- ¥ It mainly consisted of the four main groups: Assyria, Sumer, Akkad, and Babylonia.

Mesopotamia



¥ Sumerian civilization was among the early civilizations which flourished before 3500 BC. They were actually building cities, supporting people with watering system, a legal system, administration, and a postal service.

Mesopotamia



¥ Around 2300 BC the Akkadians invaded the land of Sumerian. Unfortunately, the Akkadians were a more backward civilization, however when they mixed with the more civilized Sumerians, they invented a clumsy method of counting and some arithmetic methods which they named as **Abacus**.

Mesopotamia



- ✚ By 2100 BC the Sumerians revolted against the Akkadian and took over the area again.
- ✚ The Sumerians developed an abstract form of writing which they called **cuneiform symbols**, which means wedge-shaped.

Mesopotamia



- ✚ Around 2000 BC Babylonian invaded most of Mesopotamia, and took over the land of Sumerians; and around 1900 BC they established their capital at Babylon.
- ✚ Babylonian were Semitic people, adapted the cuneiform writing style and to some extent changed it and had their own symbols.

Sumerian

- ✚ Sumerian recording system was accomplished through drawing images of tokens on a wet clay tablets.
- ✚ Different types of goods were presented by different type of symbols such as grain, fish, cow, etc.
- ✚ For example if they exchange three sacks of grain then they would draw three symbols of grains.

Sumerian

- ✚ However with the advancement in trade this type of recording became difficult for the two reasons:
 1. The increase in variety of goods
 2. They had to deal with larger quantities of goods.
- ✚ As a result they started to separate between the symbols of good and symbols of quantities.

Sumerian

¥ For example

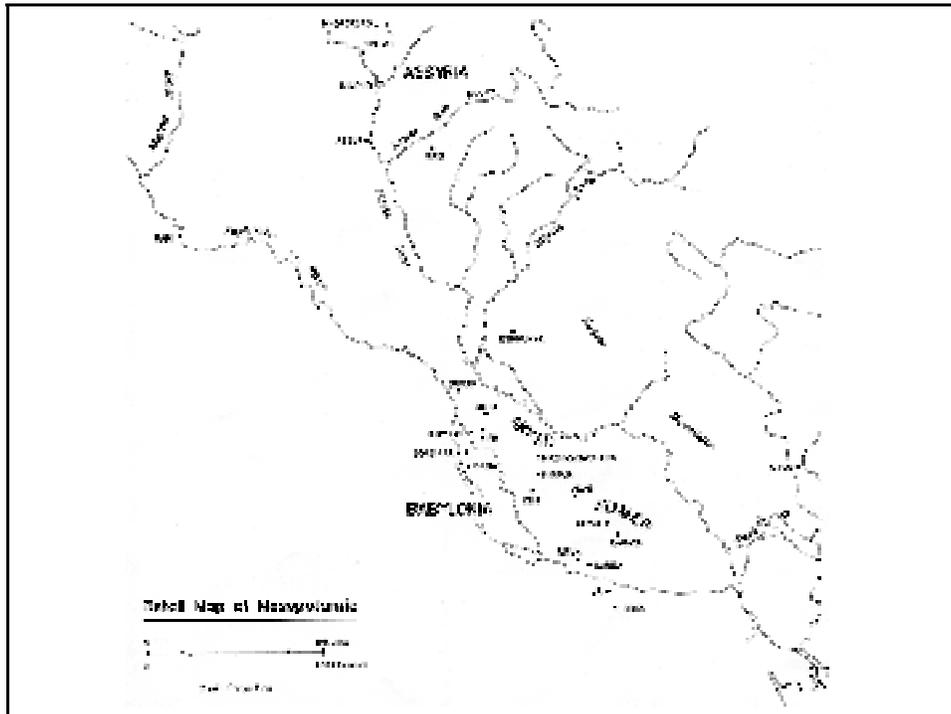


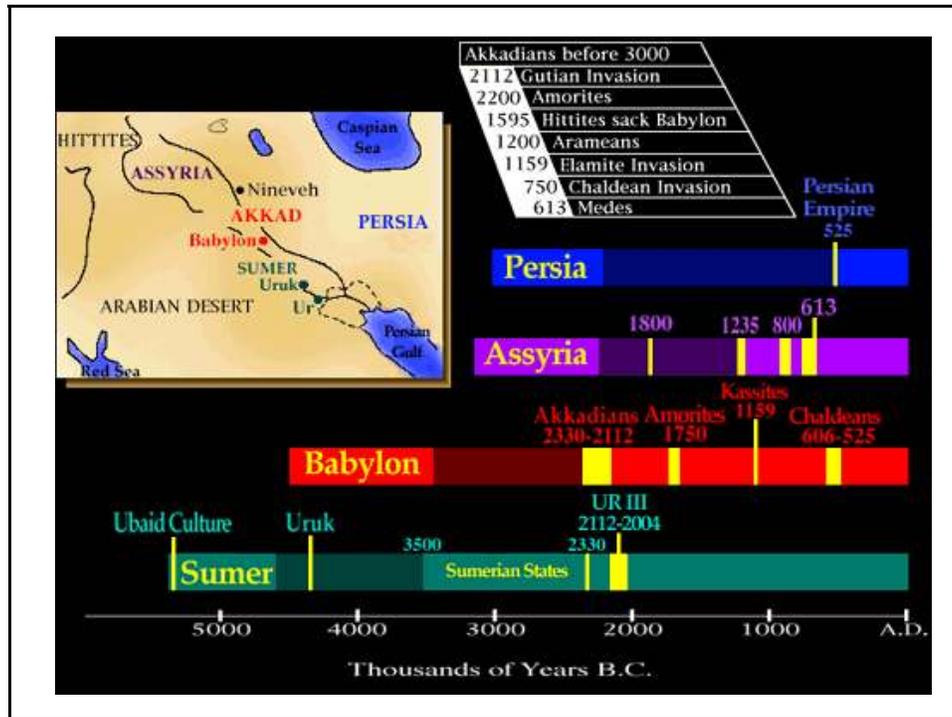
Babylonia

¥ The Babylonian had their own symbols to represent numbers.

1	∩	11	∩∩	21	∩∩∩	31	∩∩∩∩	41	∩∩∩∩∩	51	∩∩∩∩∩∩
2	∩∩	12	∩∩∩	22	∩∩∩∩	32	∩∩∩∩∩	42	∩∩∩∩∩∩	52	∩∩∩∩∩∩∩
3	∩∩∩	13	∩∩∩∩	23	∩∩∩∩∩	33	∩∩∩∩∩∩	43	∩∩∩∩∩∩∩	53	∩∩∩∩∩∩∩∩
4	∩∩∩∩	14	∩∩∩∩∩	24	∩∩∩∩∩∩	34	∩∩∩∩∩∩∩	44	∩∩∩∩∩∩∩∩	54	∩∩∩∩∩∩∩∩∩
5	∩∩∩∩∩	15	∩∩∩∩∩∩	25	∩∩∩∩∩∩∩	35	∩∩∩∩∩∩∩∩	45	∩∩∩∩∩∩∩∩∩	55	∩∩∩∩∩∩∩∩∩∩
6	∩∩∩∩∩∩	16	∩∩∩∩∩∩∩	26	∩∩∩∩∩∩∩∩	36	∩∩∩∩∩∩∩∩∩	46	∩∩∩∩∩∩∩∩∩∩	56	∩∩∩∩∩∩∩∩∩∩∩
7	∩∩∩∩∩∩∩	17	∩∩∩∩∩∩∩∩	27	∩∩∩∩∩∩∩∩∩	37	∩∩∩∩∩∩∩∩∩∩	47	∩∩∩∩∩∩∩∩∩∩∩	57	∩∩∩∩∩∩∩∩∩∩∩∩
8	∩∩∩∩∩∩∩∩	18	∩∩∩∩∩∩∩∩∩	28	∩∩∩∩∩∩∩∩∩∩	38	∩∩∩∩∩∩∩∩∩∩∩	48	∩∩∩∩∩∩∩∩∩∩∩∩	58	∩∩∩∩∩∩∩∩∩∩∩∩∩
9	∩∩∩∩∩∩∩∩∩	19	∩∩∩∩∩∩∩∩∩∩	29	∩∩∩∩∩∩∩∩∩∩∩	39	∩∩∩∩∩∩∩∩∩∩∩∩	49	∩∩∩∩∩∩∩∩∩∩∩∩∩	59	∩∩∩∩∩∩∩∩∩∩∩∩∩∩
10	∩	20	∩	30	∩	40	∩	50	∩		

Babylonian





Final Thought

¥ What type of advanced calculus we could have obtained if we had continued using Sexagesimal