## MATH 316: History of Math

1. Read Burton §3.1. Summarize the **historical** topics discussed in these sections using at most two sentences.

2. Read Burton §3.2. Summarize the **historical** topics discussed in these sections using at most two sentences.

- 3. Provide biographical details about Thales of Miletus
  - (a) time:
  - (b) location:
  - (c) list three mathematical accomplishments attributed to Thales

- 4. Provide biographical details about Pythagoras of Samos
  - (a) time:
  - (b) location:
  - (c) list three mathematical accomplishments attributed to Pythagoras

- 5. A tall spruce tree stands in the yard of a house.
  - (a) Describe a strategy for determining the height of the tree analagous to that Thales used to determine the height of the Great Pyramid. Pick your own sample numbers to illustrate.

(b) What assumption are **implied** in the algorithm used in part (a).

- 6. The symbols  $t_n$  and  $s_n$  are introduced on page 95.
  - (a) What do these symbols represent?

- (b) It is true that  $t_n = 1 + 2 + \dots + n$  and that  $1 + 2 + \dots + n = \frac{(n+1)n}{2}$ .
  - i. What technique would a modern mathematics student use show the second equality above? (Indeed you probably proved this in Introduction to Proofs or Discrete Math.)

ii. What is a reasonable guess about how the Pythagoreans deduced that equality?