1. **Mokilese**
   a. [pi̞san] ‘full of leaves’
   b. [tu̞pu̞kta] ‘bought’
   c. [puko] ‘basket’
   d. [ki̞sa] ‘we two’
   e. [supwo] ‘firewood’
   f. [kamwɔki̞ti] ‘to move’
   g. [udu̞k] ‘flesh’
   h. [kaskas] ‘to throw’
   i. [poki] ‘to strike something’
   j. [pil] ‘water’
   k. [apid] ‘outrigger support’
   l. [lu̞ʒuk] ‘to tackle’

   A. The voiceless vowels [i̞] and [u̞] are allophones of [i] and [u] respectively. No other vowels have voiceless allophones. State the conditioning environment which accounts for their distribution. Be as general as possible.

   B. Fill in the blanks in the following words with [u] or [u̞]:
   
   k__di  ___san___ta  s___k___do  s___kpo

2. **Tohono O’odham**
   a. [ta̞t] ‘touched’
   b. [to̞m] ‘knee’
   c. [tʃ̊i̞n] ‘mouth’
   d. [tʃ̊im hekid] ‘always’
   e. [tʃ̊uk] ‘black’
   f. [tʃ̊ikpan] ‘is/was working’
   g. [tako] ‘yesterday’
   h. [tʃ̊ikwo] ‘ankle’
   i. [tʃ̊u̞ʔi] ‘flour’
   j. [to̞bi] ‘rabbī’
   k. [tas] ‘sun’
   l. [towa] ‘turkey’

   A. Determine if the sounds [t] and [tʃ̊] are allophones of a single phoneme or of separate phonemes. If they are of separate phonemes, give evidence to support your answer. If they are allophones, give the conditioning environment.

   B. Is there any assimilation? If so, what type?

   C. How would a Tohono O’odham speaker pronounce the word ‘Tuscon’?

3. **Odden p. 62, #2: Modern Greek**
   In addition to answering the questions in Odden’s directions, provide evidence also as to whether there is a contrast between [k] and [x], [k̊] and [x̊]. What does this mean to your analysis?
Graduate Students only:

4. Biblical Hebrew and Standard Arabic
Biblical Hebrew and Standard Arabic contain the sounds [t], [ṭ] and [θ]. The symbol [t] is used for an emphatic (uvularized or pharyngealized) stop here.

Biblical Hebrew:
a. [ṭɜrem] ‘not yet’
b. [tuɾ] ‘seek out’
c. [haʃabba:θ] ‘the Sabbath’
d. [maτaɾ] ‘rain’
e. [liʃhot] ‘to slay’
f. paθ̂aht[i] ‘I opened’
g. [ruθ] ‘Ruth’
h. [tabbaʕaθo] ‘ring’

i. [t’xeθo] ‘violet-blue’
j. [ʃelːt] ‘shield’
k. [laθur] ‘to seek out’
l. [wajjeʃt] ‘and he drank’
m. [maθaj] ‘when’
n. [tuɾ] ‘row’
o. [uθ̂xeθo] ‘and violet-blue’
p. [liʃoθ] ‘to open’

A. On the basis of these data, determine whether the three sounds in Biblical Hebrew are different phonemes or whether two or three of them are allophones of a single phoneme. Justify your answer.

Standard Arabic:
a. [ṭu ينب] ‘bricks’
b. [θawb] ‘garment’
c. [ʔassabt] ‘the Sabbath’
d. [maτar] ‘rain’
e. [talaba] ‘he searched’
f. [ṭu ينب] ‘repent’
g. [ʔaθar] ‘effect’
h. [taθbitt] ‘strengthening’

i. [baθo] ‘discussion’
j. [θalaba] ‘he slandered’
k. [baθt] ‘pure’
l. [qaθt] ‘drought’
m. [mataː] ‘when’
n. [matlab] ‘quest’
o. [jabαθ] ‘spider’
p. [mutaθallabaθo] ‘requirements’

B. Determine whether the Standard Arabic [t], [ṭ], and [θ] are different phonemes or whether two or three of them are allophones of a single phoneme. Justify your answer.

C. Do the sounds have the same phonological status in the sound systems of Standard Arabic and Biblical Hebrew? Explain.