

Definition 1. The function **Consonants** pairs a string of letters with the same string, but the vowels removed, leaving only the consonants.

- The domain of Consonants is all strings of letters in the English alphabet.
- The codomain of Consonants is all strings of letters in the English alphabet.
- The pair $(\text{string1}, \text{string2})$ is a member of the Consonants function if string2 is string1 with the vowels removed.

Exercise 1 Evaluate $\text{Consonants}(\text{"mathematics"})$

Multiple Choice:

- (a) *mathematics*
- (b) *"mthmtcs"* ✓

Feedback (attempt): "Remove" a, e, a, and i from mathematics and you get "mthmtcs".

Exercise 2 Evaluate $\text{Consonants}(\text{"twhmk"})$

Multiple Choice:

- (a) *"twhmk"* ✓
- (b) *"twhmk" is not in the domain*

Feedback (attempt): "twhmk" is a string of letters. If you remove the vowels, then you end up with the same string.

Exercise 3 $\text{Consonants}(\text{"wikoomdart"}) =$ *"wkmdrt"*

Exercise 4 Does the range of Consonants equal the codomain.

Multiple Choice:

- (a) Yes

(b) No ✓

Feedback (attempt): The codomain contains "cat" and the range does not.

Exercise 5 If *string1* and *string2* are two different strings of letters, then is it possible for $\text{Consonants}(\text{string1}) = \text{Consonants}(\text{string2})$?

Multiple Choice:

(a) Yes ✓

(b) No

Feedback (attempt): Example: $\text{Consonants}(\text{"book"}) = \text{Consonants}(\text{"bake"})$?
