

**University of Pennsylvania**  
**BIOL4536 Fall 2023**  
**Professor: Gregory R. Grant**  
**QUIZ#2 (SOLUTIONS)**  
(Genome Browser)

**Question 1.** (2 pts.) The first nucleotide base (position #1) of Human Chromosome 1 in the genome browser is:  
(A) A  
(B) C  
(C) G  
(D) T  
(E) N ← **THIS ONE**

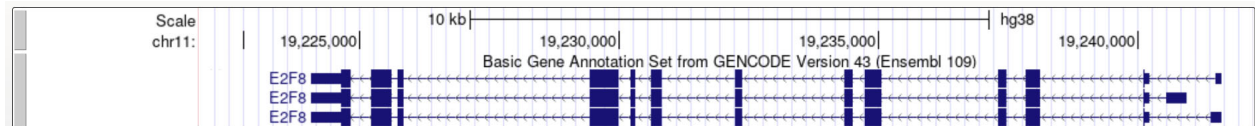
**Question 2.** (2 pts.) True or False. Exons tend to be larger than introns.

**ANSWER:** False.

**Question 3.** (2 pts.) You want to make a custom track on chr12 from position 12,000,000 to 12,001,000. What exactly do you enter in the custom track box?

**Answer:** chr12 11999999 12001000

**Question 4.** (2 pts.) For the gene shown below, circle the one statement that is true?



- (A) There are no introns in any UTR's of any isoforms.  
(B) There are introns every UTR of every isoform.  
(C) There are introns in the 3' UTR's of all isoforms but not in the 5' UTR's of any isoforms.  
(D) There are introns in the 5' UTR's of all isoforms but not in the 3' UTR's of any isoforms. ← **THIS ONE**

**Question 5.** (2 pts.) (circle the one true statement) The Table Browser is used to:

- (A) Configure the display parameters, window, font, track sizes, colors, etc.  
(B) Obtain/download the data behind the tracks. ← **THIS ONE**  
(C) For developers to configure a new genome.  
(D) Configure the tracks and save sessions.