# Feedback — Exam dna3.fasta \*\*Please Note: No Grace Period\*\*

Thank you. Your submission for this exam was received.

You submitted this exam on **Tue 29 Sep 2015 11:12 PM PDT**. You got a score of **10.00** out of **10.00**.

Welcome to the final exam.

If you haven't yet read the instructions, you can do so here.

Please run the following data set in the program(s) that you have written: dna3.fasta

If you created your program(s) correctly, you will be able to answer the questions below.

# **Question 1**

How many records are in the multi-FASTA file?

Your Answer	Score	Explanation
<u></u>		
<ul><li>● 17</li></ul>	1.00	
<u> </u>		
<u>127</u>		
Total	1.00 / 1.00	

#### **Question 2**

What is the length of the longest sequence in the file?

Your Answer	Score	Explanation
<u>265</u>		
<ul><li>● 4773</li></ul>	1.00	
<b>4080</b>		
O 5006		
Total	1.00 / 1.00	

# **Question 3**

What is the length of the shortest sequence in the file?

Your Answer		Score	Explanation
<u>49</u>			
<u> </u>			
• 37	~	1.00	
<u>269</u>			
Total		1.00 / 1.00	

# **Question 4**

What is the length of the longest ORF appearing in reading frame 2 of any of the sequences?

Your Answer Score Explanation

O 806		
<ul><li>1479</li></ul>	<b>~</b>	1.00
990		
2031		
Total		1.00 / 1.00

#### **Question 5**

What is the starting position of the longest ORF in reading frame 1 in any of the sequences? The position should indicate the character number where the ORF begins. For instance, the following ORF:

> sequence1

**ATGCCCTAG** 

starts at position 1.

Your Answer		Score	Explanation
<ul><li>22</li></ul>	~	1.00	
O 1112			
3067			
2439			
Total		1.00 / 1.00	

#### **Question 6**

What is the length of the longest ORF appearing in any sequence and in any forward reading frame?

Your Answer	Score	Explanation

2031	
<ul><li>1479</li></ul>	<b>✓</b> 1.00
<u> </u>	
1206	
Total	1.00 / 1.00

#### **Question 7**

What is the length of the longest forward ORF that appears in the sequence with the identifier gi|142022655|gb|EQ086233.1|129?

Your Answer		Score	Explanation
• 885	~	1.00	
<u>588</u>			
795			
O 747			
Total		1.00 / 1.00	

# **Question 8**

Find the most frequently occurring repeat of length 7 in all sequences. How many times does it occur in all?

Your Answer		Score	Explanation
O 111			
<ul><li>55</li></ul>	~	1.00	
<u>54</u>			

126
Total 1.00 / 1.00

# **Question 9**

Find all repeats of length 10 in the input file. Let's use Max to specify the number of copies of the most frequent repeat of length 10. How many different 10-base sequences occur Max times?

Your Answer		Score	Explanation
<b>8</b>			
<u> </u>			
<ul><li>2</li></ul>	<b>~</b>	1.00	
<b>3</b>			
Total		1.00 / 1.00	

# **Question 10**

Which one of the following repeats of length 7 has a maximum number of occurrences?

Your Answer		Score	Explanation
○ GCGCGGC			
GGCCGAA			
● CGCGGCG	<b>~</b>	1.00	
CTCGCGCT			
Total		1.00 / 1.00	