Subject: Hints for problem 3  
Posted by jarobinson3 on Fri, 19 Aug 2016 22:56:02 GMT  
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Note that:

Input is between the value of 0 and 100 (inclusive) Do each color component independently. Then combine the results with (string+ ...) X of a Y means you apply Y then restrict the length based on X. Example being "third of a cycle of a right-shift sine wave" means you shift right then only map to 0-3PI/2 Make sure you pad hex strings to be even length.

Subject: Re: Hints for problem 3  
Posted by lusth on Sat, 20 Aug 2016 16:24:42 GMT  
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I added plots for the three colors (click the highlighted color name in the description). I also adjusted the 100 value for magenta to 127.5.

Subject: Re: Hints for problem 3  
Posted by padietl on Sat, 20 Aug 2016 16:25:45 GMT  
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Do you mean 3/4 of a cycle? And how are you shifting right? just by the value in the function argument?

Subject: Re: Hints for problem 3  
Posted by jarobinson3 on Sat, 20 Aug 2016 18:15:25 GMT  
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I am giving an example. If you wanted to shift a sine wave right you would just add a negative offset inside the sine wave.

Subject: Re: Hints for problem 3  
Posted by jarobinson3 on Tue, 23 Aug 2016 21:35:15 GMT  
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For those of you who are having issues where you cannot get FFFFFF I only used PI once in my solution for computing each color. I think if you do more than the minimum number of
computations you will get precision issues.

Subject: Re: Hints for problem 3
Posted by \textit{lusth} on Wed, 24 Aug 2016 00:52:08 GMT
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My graph of yellow was wrong; I've fixed it.

Because that graph was misleading, I'm going to postpone the due date one day. Assignment 1 will be due Saturday the 17th.

Subject: Re: Hints for problem 3
Posted by \textit{gjbowen} on Thu, 15 Sep 2016 19:42:09 GMT
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\textit{jarobinson3} wrote on Fri, 19 August 2016 17:56

Note that:

Input is between the value of 0 and 100 (inclusive) Do each color component independently. Then combine the results with (string+ ...). X of a Y means you apply Y then restrict the length based on X. Example being "third of a cycle of a right-shift sine wave" means you shift right then only map to 0-3\(\pi/2\) Make sure you pad hex strings to be even length.

I've studied sine waves and shifts for longer than it should have taken and can't seem to cater it to this problem, would someone mind doing 1 more example for a left shifted 1/6 wave (arbitrary example)? I've tried many ways, and closest I've gotten is \(\sin(0+(6\pi/100))\) where 100 is the wave period.

Subject: Re: Hints for problem 3
Posted by \textit{jarobinson3} on Thu, 15 Sep 2016 19:50:02 GMT
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So you want to shift the sine wave to the left by 1/6 a full interval? That would just be \(\sin(x + 2 \cdot \pi / 6)\).

This is because a full cycle is from 0 to 2\(\pi\), so 1/6 of that would just be \((\text{begin} + (\text{end} - \text{begin}) / 6)\), or \((0 + (2 \cdot \pi) / 2) = 2 \cdot \pi / 6\)