1 Student Questions

Q. Do all questions require written justification?
Answer: All questions need to be justified and written in a clear, easily understood manner. You must use your discretion as to what that entails. Some questions are easily explained algebraically, while others may need a sentence or two to clarify what your though process is.

Q. How is this graded?
Answer: Like all applied problems in this course, each question is worth 6 points. 2 points for correctness of the answer, 2 points for logic, and 2 points for presentation. This means that the correct answer is only worth $\frac{1}{3}$ of your points, so turning in a sheet of answers with no justification will only earn 3/10 points.

2 Exercises

1. Given $\cos\theta = \frac{21}{29}$ what is $\tan\theta$?

2. If $\sin\theta = -\frac{\sqrt{2}}{2}$, what are the possible values for θ? That is, the sine of what angle measures is $\frac{\sqrt{2}}{2}$?

3. The Louvre Pyramid has a height of 21.6 meters and the sides of the square base are 34 meters. Give an equation that would allow for the calculation of the slope of the face of the pyramid in degrees.

4. In the unit circle, you have line segments connecting opposite angles, e.g. 30° and 210°.
   (a) Find the length of this line segment using two different methods.

(b) Find the slope of this line segment using two different methods.