Emina Mehmedovic

Professor Cummings

Math 1030

April 23, 2016

Final Project: How is math used in Dentistry?

Intro: my final project is on how math is used in the dentistry field. I will be talking about the certain math that is required for the dentistry field. Then I will discuss what kind of math is used in dentistry. Lastly, I will give an example of how the math is used and some statistics on the dentistry career.

* Starting out in the dentistry field certain math is required like: geometry, college Algebra, Calculus, and Statistics.
* Dental hygienists, Dentists, and dental assistants use math for calculations.
* They use angles from geometry to make models and make crowns for teeth.
* The teeth are counted in a certain way from 1 to 32.
* Dental hygienists need to know how to measure amounts of certain materials.
* Dentists use math for calculating how much lidocaine (anesthesia) to give to a patient. This all depends on the weight and age of a patient.
* For example, let’s say a dentist has a patient who is 44 lbs and 7 years old. The dentist needs to find out the maximum dosage of lidocaine that should be used for that patient.
* The first step is to convert everything into kilograms
* 1kg= 2.2 lbs
* So you take the weight of the 7 year old patient which is 44 lbs and you divide it by 2.2 lbs. 44 lbs / 2.2 lbs = 20 kilograms kg.
* To get the maximum dosage of lidocaine the dentist would take 4.4 mg/kg x 20kg which equals 88 kg.
* Then the dentist or dental hygienist has to know that 1 Carp comes with 36 kg of lidocaine.
* After the dental hygienist takes the 88kg / 36kg = 2.4 carps of lidocaine
* Lastly, the dental hygienist will give less than 2.4 carps. They’ll give 2 carps of lidocaine for a 7 year old patient that weighs 44 lbs.

In conclusion Mathematics’ is used in many career fields. Math in the dentistry fields is used to calculate measurements, number teeth, and make models for patients.