**Integumentary System – Clinical Application**

**Case Study:** A Life in the Sun

Like many people, Jim spends much of his time playing tennis, golf, and enjoying the warm weather. This includes an annual trip to beaches of south Florida for the entire month of March. After a long winter, Jim arrived in Florida ready for some fun in the sun. He immediately went to the nearest beach where he fell asleep in his beach chair. By the time he woke up, the skin on the anterior surface of his arms, chest, and lower legs (thank goodness he was wearing a swimsuit!) had become very red and swollen. Later that evening, the afflicted areas developed blisters and became very painful.

**Questions**

1. What degree of burn has Jim received?
2. What layers of skin and primary tissue types have been damaged?
3. Jim’s skin eventually developed blisters. What causes blisters?

1. Using the Rule of 9’s, what percentage of the total body surface has been burned? Show your calculations.