



SunWise Word Problems

Supplemental

Directions

Answer the following word problems about sun safe products and behavior.

1. There are two SPF numbers whose sum is 45. Four times the first equals twice the second. What are the numbers?
2. Three bottles of sunscreen and two pairs of sunglasses weigh 32 oz. Four bottles of sunscreen and three pairs of sunglasses weigh 44 oz. All bottles of sunscreen weigh the same and all pairs of sunglasses weigh the same. What is the weight of two bottles of sunscreen and one pair of sunglasses?
3. A clothing company can make long-sleeved shirts for \$4 each with a daily overhead of \$600. If they sell shirts at \$5.20 each, how many shirts must they sell to have a profit of 10 percent above their daily cost?
4. Two UV rays, one UVA and one UVB, are traveling towards your school's baseball field, where they will arrive at the same time. They start out at the same time from the sun. Since they are different wavelengths, they travel at different velocities, but both travel in a straight line. The UVB ray travels through the atmosphere at an average velocity of 20 kilometers per second for the first 5km, 40 km/s for the next 5 km, 30 km/s for the next 5 km and 50 km/s for the final 5 km. Uninterrupted, the UVA ray travels at a constant velocity. What is the velocity of the UVA ray in km/s?