

4. A diver is standing on a platform 24 feet above the pool. He jumps from the platform with an initial upward velocity of 8ft./sec. Use the formula $h = -16t^2 + vt + s$, where h is his height above the water, t is time, v is his starting upward velocity, and s is his starting height. How long will it take for him to hit the water?
5. A rectangular sheet of paper has area of 55 in². Its dimensions are $(x + 2)$ inches by $(x + 8)$ inches. What are the dimensions of the sheet of paper?
6. Suppose you are building an aquarium of volume 2880 in³. The aquarium will be 12 inches high. The base will be rectangle with a length 4 inches more than twice the width. Find the dimensions of the base.