

Quiz 4

This quiz is graded out of 15 marks. No books, watches, notes or cell phones are allowed. You must show all your work, the correct answer is worth 1 mark the remaining marks are given for the work. If you need more space for your answer use the back of the page.

Question 1. The length of a rectangular pool is 3 meters less than twice the width. If the pool's perimeter is 108 meters, what is its width?

a. (2 marks) Write an equation to model the problem. Use x to represent the width of the pool.

b. (2 marks) Solve the equation to find the width of the pool.

Question 2.(5 marks) An apple contains 80 calories and 3g of fiber. A banana contains 135 calories and 4g of fiber. Set up and solve a system of equations to determine the number of apples (A) and bananas (B) that should be eaten to obtain 3920 calories and 130g of fiber.

Question 3.(5 marks) Solve the following equation by factoring: $8x^3 + 25x = 30x^2$.