

QUIZ 1

This quiz covers sections P3, 1.2 and 1.3.

Exercise 1: Simplify using properties of exponents: $\frac{72x^{\frac{3}{4}}}{9x^{\frac{1}{3}}}$ (1 point)

Exercise 2: Find the solution of the equation, if there is one:

$$\frac{5}{x+2} + \frac{3}{x-2} = \frac{12}{(x+2)(x-2)} \quad (1 \text{ point})$$

Exercise 3: Find all the values of x satisfying the given conditions:

$$y_1 = \frac{2x-1}{x^2+2x-8}, y_2 = \frac{2}{x+4}, y_3 = \frac{1}{x-2} \text{ and } y_1 + y_2 = y_3 \quad (2 \text{ points})$$

Exercise 4: Things did not go quite as planned. You invested \$12,000, part of it in stock that paid 14% annual interest. However, the rest of the money suffered a 6% loss. If the total annual income from both investments was \$680, how much was invested at each rate? (3 points)

Exercise 5: The length of the rectangular tennis court at Wimbledon is 6 feet longer than twice the width. If the court's perimeter is 228 feet, what are the court's dimensions? (2 points)

Exercise 6: Solve the formula for R_2 : $\frac{1}{R} = \frac{1}{R_1} + \frac{1}{R_2}$ (1 point)