

QUIZ 4

This quiz covers sections 1.6, 1.7 and 2.1.

Exercise 1: Solve the radical equation and check the proposed solutions:

$$\sqrt{x + 3} = x - 3 \quad (1 \text{ point})$$

Exercise 2: Solve the equation with rational exponent and check the proposed solutions:

$$(x + 5)^{\frac{2}{3}} = 4 \quad (1 \text{ point})$$

Exercise 3: A company manufactures and sells personalized stationery. The weekly fixed cost is \$3000 and it costs \$3.00 to produce each package of stationery. The selling price is \$5.50 per package. How many packages of stationery must be produced and sold each week for the company to generate a profit? (2 points)

Exercise 4: Evaluate and simplify $g(-1)$, $g(x + 2)$ and $g(-x)$ where g is the function: $g(x) = x^2 - 10x - 3$ (3 points)

Exercise 5: Use the following graph of $f(x)$ to determine

a) the function's domain and range

b) the x- intercepts and the y- intercepts

c) $f(-3)$ and $f(2)$ (3 points)

