

Quiz 1

1. A manufacturer produces a product for which the fixed cost is 40,000 SR per year and the variable cost is 50 SR per unit. Assume that 70% of the produced units can be sold for 100 SR per unit while the rest has to be sold at 20% discount. Find the number of units that should be produced each year so that the annual profit is 400,000 SR.

2. Solve the following system of equations:

$$x + y + z = 8$$

$$x - y + 2z = 4$$

$$3x - 2y + z = 5$$

3. Find the slope-intercept form of the equation of the line through the points $(1, 2)$ and $(3, 4)$.