



Problem Solving Scenario: Valuable Minerals

Business name: Northwestern Mutual

Position/Department of business partner (if applicable): Ray Costa, Financial Advisor

Grade level and subject: Grade 11-12 math

Standards and skills addressed: Using probability to make decisions; Linear, quadratic, and exponential models; interpret expressions for function in terms of the situation they model

Career Cluster: Finance; STEM

Problem Description:

Your family owns a large plot of land which you recently learned has valuable minerals beneath the surface. Two companies approach you about leasing the mineral rights to your property. After speaking with an expert, and the two companies competing for your rights, you need to predict future payments and create a financial plan for your family.

Things to be considered or defined for the solution:

- Payment options from both companies
- Age and make-up of the family involved, including extended family
- Current financial situation, including possible pensions
- Current interest rates
- Financial priorities and goals of the family

16 Career Clusters:

Agriculture, Food, Natural Resources

Architecture and Construction

Arts, A/V technology & Communications

Business Management & Administration

Education & Training

Finance

Government & Public Administration

Health Science

Hospitality & Tourism

Human Services

Information Technology

Law, Public Safety, Corrections & Security

Manufacturing

Marketing

Science, Technology, Engineering & Math

Transportation, Distribution, & Logistics