

ZMATH 2015d.00901

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Investment choices.

Consortium 106, 11 p., pull-out section (2014).

From the text: In this pull-out, students consider three types of investments: currency-based, non-productive assets, and productive assets. In Activity 1, students determine annual rates of the return on gold investments (non-productive asset) and then adjust those rates for inflation and taxes. In Activity 2, students calculate the percentage increase and/or decrease in gold prices over a variety of time periods. The concept of investment bubbles is introduced. In Activity 3, students compare growth in S&P 500 stocks (productive-assets investments) to treasury bills (currency-based investments). Activity 4 is an exercise set in which students can apply what they have learned in Activities 1–3. Students need to be able to calculate percentages. They should have some familiarity with compound interest formulas (or you will need to introduce the topic). Given an equation in which one variable is expressed in terms of several others, students should be able to solve for the other variables separately. This will require taking roots and logarithms. Students will need to fit an exponential function to data. Instructions for using ExpReg on a TI-84 or Trendline in Excel are provided in the Lesson Notes for Activity 2.

Classification: M30 U70 F80 I20

Keywords: mathematical applications; financial mathematics; investment; gold; inflation; taxes; graphics calculators; spread sheets; student activities; percentages; exponential functions; logarithms; stock investments; treasury bills; internet search; information retrieval; general compound interest formula