

4.4a: Slope Application

“I WILL...

Apply the slope formula to real-life situations.”

I. Slope Equation:

A. $m =$ _____

B. Rewrite it as: $m =$ _____

II. Steps

- A. Read the question, TWICE
- B. Understand and TRANSLATE the QUESTION
- C. SOLVE using Substitution or Elimination and label accordingly
- D. CHECK answer

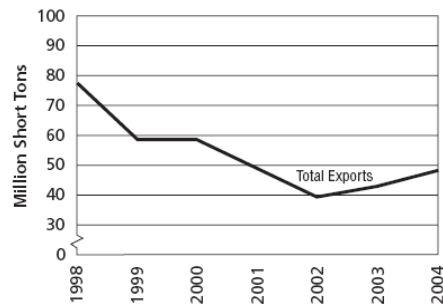
III. Model Problems

Ex 1: The table shows the population density for the state of Texas in various years. What is the average annual rate of change in the population density from 1990 to 2000?

Population Density	
Year	People Per Square Mile
1930	22.1
1960	36.4
1980	54.3
1990	64.9
2000	79.6

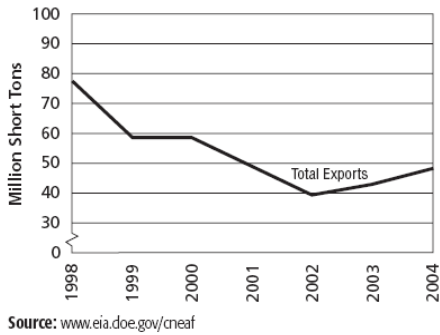
Source: Bureau of the Census, U.S. Dept. of Commerce

Ex 2: The graph shows the annual coal exports from US mines in millions of short tons. What is the rate of change in coal exports in 2003 and 2004?

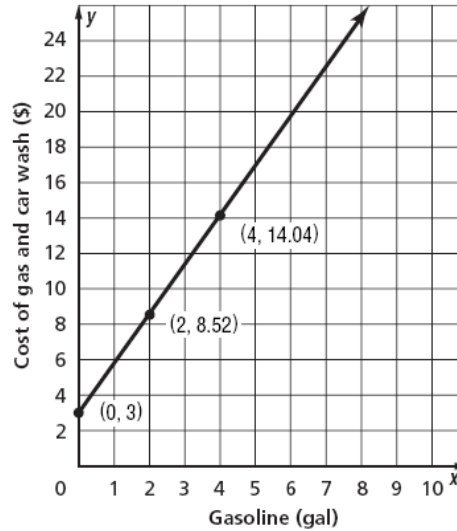


Source: www.eia.doe.gov/cneaf

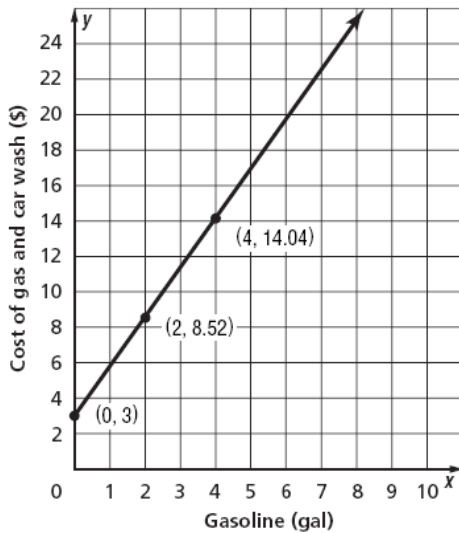
Your Turn: The graph shows the annual coal exports from US mines in millions of short tons. How does the rate of change from 1998 and 1999 compare to 2002 and 2004?



Ex 3: The graph below shows the cost of gas and car wash in relation to gasoline. What is the rate of change from 2 gallons and 4 gallons?



Ex 3: The graph below shows the cost of gas and car wash in relation to gasoline. What is the rate of change from 2 gallons and 6 gallons?



Your Turn: The graph below shows the cost of gas and car wash in relation to gasoline. What is the rate of change from 0 gallons and 4 gallons?

