

MAT 142: College Mathematics

Lecture Notes: Chapter 9 (Part 1)

9.1: Percent

Changing Percent to Fraction:

Changing Percent to Decimal:

Changing Fraction to Percent:

Changing Decimal to Percent:

Directions: Fill in the missing values in the table with the equivalent percent, fraction, or decimal.

Percent	5%	2.8%	0.6%						
Decimal				.93	8.43	9.1			
Fraction							$\frac{2}{5}$	$\frac{21}{20}$	$\frac{3}{16}$

Percent Statement Problems:

EQUATIONS

1. What is 35% of 140?
2. 50 is 15% of what number?
3. 240 is what percent of 130?

PROPORTIONS

Word Problems:

4. The AZ Diamondbacks have a record of 82 wins and 60 losses. What percent of their games did they win?
5. There were 8387 new AIDS cases reported among 20 to 29 year olds in 1995. The number of new cases reported for this group in 2003 was only 42.57% of the number reported in 1995. How many were reported in 2003?
6. In 2004, there were 5741 MP3 players sold in the United States, an increase of 89.14% over 2003. How many MP3 players were sold in the US in 2003?

9.2: Interest

A. Simple Interest

Simple Interest Formulas:

Variables Used:

- 1) If you deposit \$2000 in a bank account paying 5% annual interest, how much interest will the account earn in 4 years?

- 2) Using the information in the example above, how much will be in the account in 4 years?

- 3) You plan to save \$5000 for a trip to Hawaii in three years. Your bank offers a CD that pays 5.5% annual interest – simple. How much money do you need to put in the account now to have \$5000 in 3 years?

B. Compound Interest

What is it?

Formula for Compound Interest:

