

Chapter 7 section 5
Interest

Simple Interest Formula:

$$I = Prt$$

I Interest

P Principal – initial amount invested or borrowed.

r Rate – Interest rate, usually given as a percent per year.

t Time – Time duration of the loan or investment. If the interest rate is per year, then time must be measured in years.

Example 1: page 542

How much simple interest is earned if \$1200 is invested at 4% per year for 5 years.

I must compute

P Principal \$1200

r Rate 4% per year change to a decimal 0.04

t Time 5 years

$$I = P r t$$

$$I = (1200)(0.04)(5) \text{ multiply}$$

$$I = \$240$$

Interest earned in 5 years is \$240.

Example 2: Page 543

A contractor borrows \$5000 at 4.5% per year. The interest accrued is simple interest. the duration of the loan is 6 months. How much will the contractor have to pay back at the end of the 6-month loan period?