

Applications: Simple Interest

Simple Interest

- A. Lia invested a \$3000 for 1 year at 5.5% interest. If she made no changes to the investment (no deposits or withdrawals) during the year, find the total of her investment, including interest at the end of one year.

Unknowns: $T =$ Total after 1 year

Equation: Interest = Principle \cdot Rate \cdot Time

- B. JJ invested a total of \$15,000 in two different savings accounts. One account yields 4% annual interest while the other yields 3% annual interest. Find how much JJ invested in each account if the combined yearly interest from both accounts is \$545.

Unknowns: $P =$ Amount invested in first account
 $15000 - P =$ Amount left over to invest in second account

percent	Dollars invested	Interest earned
.04	P	.04 (P)
.03	$15000 - P$.03 ($15000 - P$)
	15000	545

Equations: Interest = Principle \cdot Rate \cdot Time
 Interest from first account = _____ that is 4% for one year
 Interest from second account = _____
 Total Interest = Interest from first account + interest from second account

- C. Jean loaned her brother some money at 9% simple interest and her sister one-half as much at 16% simple interest. If she received a total of \$3.40 in interest after one year, then find how much she loaned to each one.

Unknowns: $P =$ Amount loaned to brother
 _____ = Amount loaned to sister

Equations: Interest = Principle \cdot Rate \cdot Time
 Interest from brother = _____
 Interest from sister = _____
 Total Interest = Interest from brother + interest from sister

TRY:

Ty plans to invest a total of \$5,500 for 1 year. He will invest some of it at 6.5% annual simple interest and the rest at 8% annual simple interest. If he will earn \$380 in interest after 1 year, find how much Ty invested in each account.