

Example 2

Sophie invested \$35 000 with her financial advisor. In the first year, her portfolio gave the following returns:

Type	% of portfolio	Rate of return %
Low risk	45%	8.95%
Medium risk	40%	3%
High risk	15%	-5.3%

- a) How much money did Sophie invest in each type of investment?
 b) Determine the total return, in dollars, for the first year.
 c) Determine the rate of return for the portfolio for the first year.

a) Low risk : $35\ 000 \times 0.45 = \$15\ 750$
 Medium risk : $35\ 000 \times 0.40 = \$14\ 000$
 High risk : $35\ 000 \times 0.15 = 5\ 250$
 $\frac{15\ 750 + 14\ 000 + 5\ 250}{1.00} = \underline{\underline{\$35\ 000}}$

b) Return
 Low risk : $\$15\ 750 \times 1.0895 = \$17\ 159.63$
 Medium risk : $\$14\ 000 \times 1.03 = \$14\ 420.00$
 High risk : $\$5\ 250 \times 0.947 = \$4\ 971.75$
 $(1 - 0.053)$
 $\underline{\underline{\$36\ 551.38}}$ TOTAL VALUE

* Interest Earned = TOTAL VALUE - INVESTMENT
 $\Rightarrow 36\ 551 - 35\ 000 = \$1\ 551.38$

c) $ROR = \frac{\text{AMOUNT OF INTEREST EARNED}}{\text{AMOUNT OF ORIGINAL INVESTMENT}} \times 100$
 $= \frac{1\ 551.38}{35\ 000} \times 100$
 $= 4.43\%$