


 LESSON
12.6

Mutual Funds

Vocab:

Mutual Fund - a pool of money that is invested in several stocks/etc.
(may have part of a share)

Net Asset Value - (NAV) - the value of one share of the fund

Loading Charge - Commission for "loading" or "unloading" your fund.
Type A → front loading ; Type B → back loading

Loading Charge = Loading Rate × Amount Invested or Amount of Sale

Number of Shares Purchased = $\frac{\text{Amount Invested} - \text{Loading Charge}}{\text{Net Asset Value per Share}}$

Net Selling Price = (Number of shares × Selling Price per Share) - Loading Charge

Profit(Loss) = Net Selling Price - Investment

**LESSON
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Martin Levy invested \$25,000 in the Jennison Dryden Utility Mutual Fund (Type A). The net asset value is \$15.58 per share. The fund is front-loaded with a loading rate of 5.50%. What is the loading charge? How many shares did Martin buy?

$$0.055(25000) = \$1375$$

$$\frac{(25000 - 1375)}{15.58} = 1516.4 \text{ shares}$$

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Complete the problems. Check your answers in the back of the book.

1. Suki and Taj Majorka invested \$12,500 in the Eaton Vance Dividend Builder Fund (Type A). The net asset value is \$21.71. The fund is front-loaded with a loading rate of 5.75%. (a) What is the loading charge? (b) How many shares did they buy?

$$a) \quad 0.0575(12500) = \$718.75$$

$$b) \quad \frac{(12500 - 718.75)}{21.71} = 542.7 \text{ shares}$$

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Complete the problems. Check your answers in the back of the book.

2. Bayne Grycza invested \$30,000 in the Hanson Ryder Mutual Fund (Type A). The net asset value is \$16.80 per share. The fund is front-loaded with a loading rate of 3.5%. (a) What is the loading charge? (b) How many shares did Bayne buy?

$$a) 0.035(30000) = \$1,050$$

$$b) \frac{30000 - 1050}{16.80} = 1723.2 \text{ shares}$$

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EXAMPLE 2

The Washingtons invested \$35,200 in the Franklin Templeton "B" Mutual Fund. The net asset value of the fund at the time of purchase was \$14.08 and was back-loaded, with a loading rate of 4.25%. When the Washingtons sold their fund shares, the net asset value was \$15.75. How many shares did the Washingtons buy? Considering the back-end load, how much profit (loss) did the Washingtons make on their investment?

*no charge
until you sell*

$$\frac{35,200}{14.08} = 2500 \text{ shares}$$

$$2500(15.75) = \$39,375$$

$$0.0425(39,375) = \$1,673.44$$

$$\rightarrow 39,375 - 1,673.44 = \$37,701.56$$

$$37,701.56 - 35,200$$

$$\$2,501.56 \text{ profit}$$

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Complete the problem. Check your answer in the back of the book.

3. Diane Kent invested \$9,240 in the MFS Utilities "B" Mutual Fund. The net asset value of the fund at the time of purchase was \$18.48 and was back-loaded, with a loading rate of 3.0%. When Diane sold her fund shares, the net asset value was \$18.25. (a) How many shares did Diane buy? (b) Considering the back-end load, how much profit (loss) did Diane make on her investment?

$$a) \quad \frac{9240}{18.48} = \boxed{500 \text{ shares}}$$

$$b) \quad 500(18.25) = \$9125$$

$$\text{left: } 97\%$$

$$0.97(9125) = \$8851.25$$

$$8851.25 - 9240$$

$$\boxed{\$388.75 \text{ loss}}$$



Bonds

Vocab:

Bonds - a written agree that when you buy the bond you will get that money back plus interest.

**LESSON
12.7****EXAMPLE**

George Vanderhill purchases a Ford Fund—\$1,000 bond at the quoted price of 89.5. The bond pays interest at a rate of 6%. Find (a) the interest, (b) the cost of the bond, and (c) the annual yield.

a) $0.06(1000) = \$60$

b) $0.895(1000) = \$895$

c) $\frac{60}{895} = 0.0670$
 6.70%

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Complete the problems. Check your answers in the back of the book.

For the following bonds, find (a) the interest, (b) the cost of the bond, (c) the annual yield.

1. A \$1,000 GE Global bond at 80.5 that pays 6% interest.

a) $0.06(1000) = \$60$

b) $0.805(1000) = \$805$

c) $\frac{60}{805} = 0.0745 = 7.45\%$

**LESSON
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Complete the problems. Check your answers in the back of the book.

For the following bonds, find (a) the interest, (b) the cost of the bond, (c) the annual yield.

2. A \$10,000 Dallas Municipal bond at 102.5 that pays 5% interest.

$$a) 0.05(10000) = \$500$$

$$b) 1.025(10000) = \$10,250$$

$$c) \frac{500}{10250} = 0.0488 = \boxed{4.88\%}$$

**LESSON
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For Problems 3–6, find (a) the cost of the bond, (b) the interest, and (c) the annual yield.

| | Source | Face Value of Bond | Quoted Price | Cost of Bond | Interest Rate | Annual Interest | Annual Yield |
|----|--------|--------------------|--------------|--------------|---------------|-----------------|--------------|
| 3. | GC Inc | \$10,000 | 70.25 | a. | 3.00% | b. | c. |

a) $0.7025(10000) = 7025$

b) $0.03(10000) = 300$

c) $\frac{300}{7025} = 0.0427 = 4.27\%$