

1. If residual income is negative \$10,000, reported profit is \$20,000, and ROI is 40%, what is the required rate of return?
- a. 40%
  - b. 20%
  - c. 10%
  - d. 5%
  - e. Insufficient information available.

$$\text{RI} = \text{profit} - (i \times \text{investment}) \qquad \text{ROI} = \text{profit} / \text{investment}$$

Two out of three ROI items are known (profit and ROI), as such, rearranging the ROI formula:

$$\text{Investment} = \$20,000 / 40\% = \$50,000$$

Now go back to the RI formula... all is known except for "i":

$$-\$10,000 = \$20,000 - (i \times \$50,000)$$

The required return is 60%... which isn't an option... my sincere apologies if this problem was driving you nuts (I took it from a test bank before class today... if nothing else, this highlights the value of "none of the above" ... for what it's worth, the question writer liked 20% as an answer).

Baum Company estimates payments for its materials as: 60% in the month of purchase, 35% the month following, and 5% the second month following. Actual and estimated purchases are: February \$150,000; March \$175,000; and April \$180,000. The estimated April cash payments for purchases would be:

- a. \$108,000
- b. \$160,250
- c. \$176,750
- d. \$180,000
- e. None of the above

$$\text{February } \$150,000 \times 5\% = 7,500$$

$$\text{March } \$175,000 \times 35\% = 61,250$$

$$\text{April } \$180,000 \times 60\% = 108,000$$