BE8.1 ([LO 1](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0003)), AP Ortega Company manufactures computer hard drives. The market for hard drives is very competitive. The current market price for a computer hard drive is $45. Ortega would like a profit of $10 per drive. How can Ortega accomplish this objective?

*Use cost-plus pricing to determine selling price.*

Profit = Market Price - Cost of Manufacturing

= $45- $35

= $10

Ortega would have to achieve economies fo scale and restrict the cost of manufacturing the harddrives to $35 per unit.

BE8.2 ([LO 2](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0005)), AP Mussatto Corporation produces snowboards. The following unit cost information is available: direct materials $12, direct labor $8, variable manufacturing overhead $6, fixed manufacturing overhead $14, variable selling and administrative expenses $4, and fixed selling and administrative expenses $12. Using a 30% markup percentage on total unit cost, compute the target selling price.

*Compute ROI per unit.*

Total per unit cost = (DM +DL +Variable Manufacturing Overhead + Fixed Manufacting Overhead + variable expenses + fixed expenses)

= (12+8+6+14+4+12)=$56

Therefore, the target selling price is $56\*1.3 = $72.80

BE8.3 ([LO 2](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0005)), AP Jaymes Corporation produces high-performance rotors. It expects to produce 50,000 rotors in the coming year. It has invested $10,000,000 to produce rotors. The company has a required return on investment of 12%. What is its ROI per unit?

*Compute markup percentage.*

Required ROI = Total return on Investment/Investment on producing rotors

= 10,000,000 \* 12%

= $1,200,000

Thus, ROI per unit = Total return on investment/50,000 rotors

= 1,200,000/50,000

= $24 per unit

BE8.4 ([LO 2](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0005)), AP Morales Corporation produces microwave ovens. The following unit cost information is available: direct materials $36, direct labor $24, variable manufacturing overhead $18, fixed manufacturing overhead $40, variable selling and administrative expenses $14, and fixed selling and administrative expenses $28. Its desired ROI per unit is $30. Compute its markup percentage using absorption cost pricing.

*Compute ROI and markup percentage.*

Markup % = ROI + Selling and administrative expenses/ Unit Product Cost

ROI per unit = $30

Selling and administrative expenses = $42

Unit Product Cost = DM + DL+ VMO+ FMO= $118

Markup % using absorption cost pricing = $30 +$42/$118\*100 = 61.02%

BE8.5 ([LO 2](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0005)), AP During the current year, Chudrick Corporation expects to produce 10,000 units and has budgeted the following: net income $300,000, variable costs $1,100,000, and fixed costs $100,000. It has invested assets of $1,500,000. The company’s budgeted ROI was 20%. What was its budgeted markup percentage using a full-cost approach?

*Use time-and-material pricing to determine bill.*

Profit Expected = $1,500,000 \*20% = $300,000

Total Cost = Variable +Fixed

= 1,100,000+100,000 = 1,200,000

Budgeted Markeup % = Profit/total cost

= 300,000/1,200,000 = 25%

BE8.6 ([LO 3](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0007)), AP Rooney Small Engine Repair charges $42 per hour of labor. It has a material loading percentage of 40%. On a recent job replacing the engine of a riding lawnmower, Rooney worked 10.5 hours and used parts with a cost of $700. Calculate Rooney’s total bill.

*Determine minimum transfer price.*

Material Cost = $980 (700\*1.4)

Labor Costs = $441 (10.5\*$42)

So the total bill would be the two added together, $1,421.

BE8.7 ([LO 4](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0009)), AP The Heating Division of Kobe International produces a heating element that it sells to its customers for $45 per unit. Its unit variable cost is $25, and its unit fixed cost is $10. Top management of Kobe International would like the Heating Division to transfer 15,000 heating units to another division within the company at a price of $29. The Heating Division is operating at full capacity. What is the minimum transfer price that the Heating Division should accept?

*Determine minimum transfer price with excess capacity.*

As the Dividion is operating at FULL CAPACITY (one must consider opportunity cost or contribution margin), thus, the minimum transfer price should be the same as to outside customers. So the minimum transfer price that they should accept should be $45.

$20 +$25 = $45

BE8.8 ([LO 4](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0009)), AP Use the data from BE8.7 but assume that the Heating Division has sufficient excess capacity to provide the 15,000 heating units to the other division. What is the minimum transfer price that the Heating Division should accept?

*Determine minimum transfer price for special order.*

Transfer Price with enough capacity = VC +LCM

= $25 +0

= $25

BE8.9 ([LO 4](https://jigsaw.vitalsource.com/books/9781119709558/epub/OPS/c08.xhtml?favre=brett#c08-feafxd-0009)), AP Use the data from BE8.7 but assume that the units being requested are special high-performance units, and the division’s unit variable cost would be $27 (rather than $25). What is the minimum transfer price that the Heating Division should accept?

MTP=Variable cost per unit - Opportunity cost per unit

$27 +$20 = $47

Working Note\* The division is operating at full capacity, the contribution lost die to departmental transfer will be charged as opportunity cost.

= $45- $25 = $20