



Converting from Cash Basis to Accrual Basis of Accounting

To convert between the accrual basis of accounting and the cash basis of accounting, we must remember that in the accrual basis, revenues are recognized when earned (rather than when cash is received) and expenses are recognized when incurred (rather than when paid). In the cash basis, we are only interested in cash receipts, cash payments, and net change in cash resulting from operating, investing, and financing activities during a period.

Case Study

Angelique started a catering company on January 1, 2010. She invested \$16,000 cash deposited into a business account. She purchased a van for the business for \$25,000 (\$12,500 cash and \$12,500 on a note payable at 8% interest) depreciable at 20% per year. She operated primarily on a cash basis and needs help determining her net income/loss for the first year of operation. She provides you with the following information:

1. She had \$350 cash on hand and \$29,635 cash in the bank at the end of the year.
2. Her receipts for cash purchases of inventory total \$32,800.
3. She has \$520 worth of inventory left over at the end of the year.
4. She paid \$1,314 cash for truck operating costs and has an unpaid invoice for a recent truck repair totalling \$275.
5. She paid the interest for one year for the truck loan.
6. She has been taking \$1,500 a month for 12 months of living expenses.

Prepare a multistep accrual income statement for Angelique.

STEP 1: Determine the total sales revenue

We use the following formula to determine cash sales:

$$\text{Ending Cash} + \text{Cash Payments} - \text{Beginning Cash} = \text{Cash Sales}$$

- a) Ending Cash = \$350 + \$29,635 = \$29,985
- b) Beginning Cash = \$16,000
- c) Cash Payments – create a list of all CASH payments and sum them up.

Cash Payments

Truck	\$12,500
Inventory	32,800
Truck operating costs	1,314
Interest expense (\$12500 × 0.08)	1,000
Living expense (\$1500 × 12)	<u>18,000</u>
Total Payments	\$65,614

$$\text{Cash Sales} = \$29,985 + \$65,614 - \$16,000 = \$79,599$$



STEP 2: Determine the cost of sales (cost of goods sold).

Take the amount spent on inventory and if there is unused inventory left over, DEDUCT this amount. If there is an unpaid invoice for an inventory purchase, ADD this amount.

$$\text{Cost of Sales} = \$32,800 - \$520 = \$32,280$$

Step 3: Determine the operating expenses

This includes operating expenses and items like interest expense and depreciation expense. NOTE: living expenses SHOULD NOT BE INCLUDED in the income statement as they violate the business entity principle.

For Angelique, this section of the income statement should include truck operating costs (\$1,314 + \$275 = \$1,589), interest expense (\$1,000), and depreciation expense (\$25,000 × 0.2 = \$5,000).

Step 4: Prepare the multistep income statement

Angelique's Catering Company
Income Statement
For the Year Ended December 31, 2010

Sales Revenue		\$79,599
Less: (Cost of Goods Sold)		<u>(32,280)</u>
Gross Profit		\$47,319
Operating Expenses		
Truck operating costs	\$1,589	
Interest expense	1,000	
Depreciation expense	<u>5,000</u>	<u>(\$7,589)</u>
Net Income (before taxes)		<u>\$39,730</u>

Practice Case Study

Ben McClimon started a small company of hot dog vendor stands on January 3, 2009. He invested \$35,000 into a business account. He bought three hot dog carts for \$7,500 each, paying \$11,250 in cash and financed the rest by a note payable at 7% interest. The hot dog carts depreciate at 10% per year. He paid a monthly fee of \$600 to the city for street licensing. Purchase invoices show he paid \$10,479 for food and beverage inventory with an unpaid invoice for \$153 left over. Other costs paid during the year include fuel costs of \$1,248 and casual labour costs of \$2,350. He has a wages payable owing of \$320 for the last two weeks of the year. He paid the interest on the note payable for the year. In addition, Ben withdrew \$800 per month during the season for living expenses. At the end of the season Ben has \$125 cash on hand and \$24,932 cash in the bank. Prepare a multistep income statement for Ben.



**** Alternate practice case for solving the problem: Treat depreciation as straight line depreciation where the hot dog carts have an 8 season life and a residual value of \$1000.****

Solution

Cash Sales = Ending Cash + Payments – Beginning Cash

Cash Payments

Hot dog carts	\$11,250.00
License fee	7,200.00
Inventory	10,479.00
Fuel costs	1,248.00
Labour costs	2,350.00
Interest expense	787.50
Living expense	<u>9,600.00</u>
Total payments	\$42,914.50

Cash Sales = 25,057 + 44,377.00 – 35,000 = \$32,971.50

Income Statement For the Year Ended December 31, 2009

Sales Revenue		\$32,971.50
Cost of Goods Sold		<u>(10,632.00)</u>
Gross Profit		\$22,339.50
Operating Expenses		
Licence fee	\$7,200.00	
Fuel cost	1,248.00	
Labour cost	2,670.00	
Depreciation expense	2,250.00	
[(7500*3)*0.10]		
Interest expense	<u>787.50</u>	<u>(14,155.50)</u>
Income before taxes		<u>\$8,184.00</u>

**** Alternate practice case solution****

Depreciation expense = \$2,437.50 [(7500-1000)/8 = \$812.5/yr per cart

For 3 carts =2,437.50]

Total operating expenses = \$14,343.00

Income before taxes = \$7,996.50

