

## FA Module 6 Cash flow indirect method practice exam questions

covering cost of goods sold, net revenue, depreciation expense, net income, accounts receivable, inventory, accounts payable, receivables turnover, credit sales, cash received from customers, gross profit margin, cost of goods sold, inventory turnover, cash paid to suppliers, payables turnover, operating cash flow, financing cash flow, retained earnings, shareholder dividends

(The attached PDF file has better formatting.)

A firm's financial statements show the following amounts:

	<i>Calendar Year 20XX-1</i>	<i>Calendar Year 20XX</i>
Cost of goods sold	438	416
Net revenue	823	869
Depreciation expense	77	87
Net income	251	287
	<i>December 31, 20XX-1</i>	<i>December 31, 20XX</i>
Accounts receivable	183	140
Inventory	119	182
Accounts payable	173	143

60% of the firm's sales are on credit. The current accounts on the balance sheet are cash and marketable securities, accounts receivable, accounts payable, and inventory. Depreciation is the only non-cash expense.

### Question 6.1: Receivables turnover

What is the receivables turnover for 20XX?

Answer 6.1:  $(869 \times 60\%) / ((183 + 140) / 2) = 3.228$

(receivables turnover = credit sales / average accounts receivable).

A low receivables turnover ratio indicates inefficient receivables collection.

### Question 6.2: Cash received from customers

What is the cash received from customers in 20XX?

Answer 6.2:  $869 - (140 - 183) = 912$

(cash received from customers = net revenue - (accounts receivable) )

Take heed: (accounts receivable) = change in accounts receivable = increase in accounts receivable.

- ! If accounts receivable increase, cash received from customers is less than net revenue.
- " If net revenue = 100 and accounts receivable increases by 15, cash received from customers is 85.
- ! If accounts receivable decrease, cash received from customers is more than net revenue.

" If net revenue = 100 and accounts receivable decreases by 15, cash received from customers is 115.

#### Question 6.3: Gross profit margin

What is the gross profit margin for 20XX?

Answer 6.3:  $1 - 416 / 869 = 52.13\%$

(gross profit = net revenue – cost of goods sold  
⇒ gross profit margin =  $1 - \text{cost of goods sold} / \text{net revenue}$ )

#### Question 6.4: Inventory turnover

What is the inventory turnover for 20XX?

Answer 6.4:  $416 / ((119 + 182) / 2) = 2.764$

(inventory turnover =  $\text{cost of goods sold} / \text{average inventory}$ )

A high ratio suggests efficient “just in time” inventory management.

#### Question 6.5: Inventory bought

What is the inventory bought in 20XX?

Answer 6.5:  $416 + (182 - 119) = 479$

(inventory bought =  $\text{cost of goods sold} + (\text{inventory})$ )

Take heed:  $(\text{inventory}) = \text{change in inventory} = \text{increase in inventory}$  .

- ! If inventory increases, inventory bought > cost of goods sold.
- " If cost of goods sold = 100 and inventory increases by 15, inventory bought is 115.
- ! If inventory decreases, inventory bought < cost of goods sold.
- " If cost of goods sold = 100 and inventory decreases by 15, inventory bought is 85.

#### Question 6.6: Cash paid to suppliers

What is the cash paid to suppliers in 20XX?

Answer 6.6:  $479 - (143 - 173) = 509$

(cash paid to suppliers =  $\text{inventory bought} - (\text{accounts payable})$ )

#### Question 6.7: Payables turnover

What is the payables turnover for 20XX?

Answer 6.7:  $479 / ((173 + 143) / 2) = 3.032$

(payables turnover = inventory bought / average accounts payable)

Question 6.8: Operating cash flow

What is the operating cash flow for 20XX? (Assume shareholder dividends are a financing cash flow.)

Answer 6.8:  $287 + (912 - 869) + (416 - 509) + 87 = 324$

(operating cash flow = net income + (cash received from customers – net revenue) + (cost of goods sold – cash paid to suppliers) + depreciation expense)

In practice, firms have many non-cash expenses besides depreciation, such as non-cash compensation to executives.

Question 6.9: Retained earnings

What is the change in retained earnings during 20XX?

Answer 6.9:  $287 - 58 = 229$

( (retained earnings) = net income – shareholder dividends)