**EXERCISE – INVENTORY**

Abel & Co. merchandises the product Pen. The inventory of Abel & Co. at 31 December of Year X includes 31 items of product Pen.

Purchases and sales of product Pen were as follows (Note: sales are reported in brackets):

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Quantity purchased** | **Cost per unit****(euros)** | **Quantity sold** |
| Beginning inventory | 102 | 12 | - |
| 01 March | 18 | 10 | - |
| 30 March | - | - | 80 |
| 1 April | 16 | 11 | - |
| 1 May | 14 | 10 | - |
| 10 September | - | - | 18 |
| 1 October | 24 | 11 | - |
| 20 December | - | - | 12 |

Supposing that the company uses the perpetual inventory system, calculate the cost of the company’s inventory of product Pen at 31 December X using each of the following cost formulas:

- the weighted average cost method;

- the FIFO method;

At 31 December X the market value of product Pen is equal to 11,5 Euros.

Please indicate also the value of ending inventory to be reported in the Balance Sheet of Abel & Co. at 31 December X.

ENDING INVENTORY COST

WAC METHOD \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

FIFO METHOD \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

ENDING INVENTORY VALUE TO BE REPORTED IN THE BALANCE SHEET

IF USING WAC METHOD \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

IF USING FIFO METHOD \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

a) WACC:

wacc on 30/3 = (102\*12 + 18\*10) /120 = 11,7

wacc on 10/9 = (40\*11,7 + 16\*11 + 14\*10)/70 = 11,2

wacc on 20/12 = (52\*11,2 + 24\*11)/74 = 11,13

Ending inventory at WACC = 64 x 11,13 = 712,32

11,13 < 11,5 Ending inventory in B.S. at WACC

d) FIFO:

Ending inventory at FIFO = 10\*10 + 16\*11 + 14\*10 + 24\*11 = 680

680/64 = 10,63

10,63 < 11,5 Ending inventory in B.S. at FIFO