

Solution:

To calculate this, let us create a table for our reference:

Period	Sales of items	Purchase of items	Inventory State Under LIFO	Inventory State Under FIFO
2011, H1	500 units	1,000 units @ \$1	500 units @ \$1	500 units @ \$1
2011, H2	500 units	1,000 units @ \$2	500 units of \$1 500 units of \$2	1,000 units of \$2
For 2011	\$5,000	\$3,000	Begin: 0 End: \$1,500	Begin: 0 End: \$2,000
2012, H1	500 units	1,000 units @ \$2	500 units of \$1 1,000 units of \$2	1,500 units of \$2
2012, H2	500 units	1,000 units @ \$2.5	500 units of \$1 1,000 units of \$2 500 units of \$2.5	1,000 units of \$2 1,000 units of \$2.5
For 2012	\$5,000	\$4,500	Begin: \$1,500 End: \$3,750	Begin: \$2,000 End: \$4,500
2013, H1	500 units	1,000 units @ \$3	500 units of \$1 1,000 units of \$2 500 units of \$2.5 500 units of \$3	500 units of \$2 1,000 units of \$2.5 1,000 units of \$3
2013, H2	500 units	1,000 units @ \$3	500 units of \$1 1,000 units of \$2 500 units of \$2.5 1,000 units of \$3	1,000 units of \$2.5 2,000 units of \$3
For 2013	\$5,000	\$6,000	Begin: \$3,750 End: \$6,750	Begin: \$4,500 End: \$8,500
2014, H1	500 units	500 units @ \$3	500 units of \$1 1,000 units of \$2 500 units of \$2.5 1,000 units of \$3	500 units of \$2.5 2,500 units of \$3
2014, H2	500 units	500 units @ \$4	500 units of \$1 1,000 units of \$2 500 units of \$2.5 1,000 units of \$3	2,500 units of \$3 500 units of \$4
For 2014	\$5,000	\$3,500	Begin: \$6,750 End: \$6,750	Begin: \$8,500 End: \$9,500
2015	3,000 units	0	0	0
For 2015	\$15,000	0	Begin: \$6,750	Begin: \$9,500

This table allows us to visualize the contents of inventory after each half year, in accordance with the principles of LIFO and FIFO.

Now, let us calculate the income. The income is calculated by using the following formula:

$$\text{Income} = \text{Sales} - \text{COGS} = \text{Sales} + \text{End Inventory} - \text{Purchase} - \text{Begin Inventory}$$

So, we put the values and get the following table of income:

Year	Net Income Using	
	FIFO	LIFO
2011	\$4,000	\$3,500
2012	\$3,000	\$2,750
2013	\$3,000	\$2,000
2014	\$2,500	\$1,500
2015	\$5,500	\$8,250
Total of income	\$18,000	\$18,000

(2)

Since the business is in its initial stages, it is often better to show FIFO income as it represents higher income. The income seems reasonably stable, which attracts attention of investors to the business.