

54.1 A drill to practise LIFO, FIFO and AVCO valuations of stock

From each set of data below, compute the cost of closing stock on a LIFO, FIFO and AVCO basis.

A

STOCK MOVEMENT	units in/(out)	unit cost
opening stock	500	£10
purchase 1	1 000	£12
purchase 2	750	£14
sale	(1 500)	
purchase 3	1 800	£15
sale	(1 600)	
sale	(200)	
closing stock (units)	<u>750</u>	

LIFO:

STOCK MOVEMENTS	units in/(out)	opening stock	purchase 1	purchase 2	purchase 3	unit cost
opening stock	500	500				£10
purchase 1	1 000		1 000			£12
purchase 2	750			750		£14
sale	(1 500)		(750)	(750)		
purchase 3	1 800				1 800	£15
sale	(1 600)				(1 600)	
sale	(200)				(200)	
closing stock (units)	<u>750</u>	<u>500</u>	<u>250</u>	<u>nil</u>	<u>nil</u>	
		@	@	@	@	
		£ 10	£ 12	£14	£15	
		=	=	=	=	
LIFO stock valuation		<u>£5 000</u>	+ <u>£3 000</u>	+ <u>nil</u>	+ <u>nil</u>	= <u>£8 000</u>

FIFO:

On the FIFO assumption, the units in closing stock will be valued as coming from the latest purchases. In this case, Purchase 3 – the last purchase – was 1 800 units, so all 750 units in closing stock can be assumed to have come from Purchase 3 at a cost of £15 per unit.

FIFO stock valuation would therefore be $750 \times £15 = \text{£11 250}$.

A cont'd

STOCK MOVEMENT	units in/(out)	unit cost
opening stock	500	£10
purchase 1	1 000	£12
purchase 2	750	£14
sale	(1 500)	
purchase 3	1 800	£15
sale	(1 600)	
sale	(200)	
closing stock (units)	<u>750</u>	

AVCO:

STOCK MOVEMENTS	units in/(out)		unit cost	£
opening stock	500	@	£10.00	= 5 000
purchase 1	1 000	@	£12.00	= 12 000
purchase 2	750	@	£14.00	= 10 500
total and average	2 250	<u>27 500</u>	= £12.22	27 500
		2 250		
sale	(1 500)	@	£12.22	= (18 333)
purchase 3	1 800	@	£15.00	= 27 000
total and average	2 550	<u>36 167</u>	= £14.18	36 167
		2 550		
sale	(1 600)	@	£14.18	= (22 693)
sale	(200)	@	£14.18	= (2 837)
closing stock	750	@	£14.18	= £10 637

B

STOCK MOVEMENT:	units in/(out)	unit cost
opening stock	850	£10
sale	(200)	
purchase 1	350	£22
sale	(80)	
purchase 2	250	£16
sale	(270)	
purchase	50	£12
closing stock (units)	<u>950</u>	

LIFO:

STOCK MOVEMENTS	units in/(out)	opening stock	purchase 1	purchase 2	purchase 3	unit cost
opening stock	850	850				£10
sale	(200)	(200)				
purchase 1	350		350			£22
sale	(80)		(80)			
purchase 2	250			250		£16
sale	(270)		(20)	(250)		
purchase 3	50				50	£12
closing stock (units)	<u>950</u>	<u>650</u>	<u>250</u>	<u>nil</u>	<u>50</u>	
		@	@	@	@	
		£ 10	£ 22	£16	£ 12	
		=	=	=	=	
LIFO stock valuation		<u>£6 500</u>	+ <u>£5 500</u>	+ <u>nil</u>	+ <u>£ 600</u>	= <u>£12 600</u>

FIFO:

Here the units in closing stock are assumed to come from the latest purchases. Going back through the sequence of purchases to reach the number of units in closing stock gives a calculation like this:

	units		unit cost	£
from Purchase 3	50	@	£12	600
from Purchase 2	250	@	£16	4 000
from Purchase 1	350	@	£22	7 700
from opening stock	<u>300</u>	@	£10	<u>3 000</u>
closing stock	<u>950</u>			<u>£15 300</u>

B cont'd

STOCK MOVEMENT:	units in/(out)	unit cost
opening stock	850	£10
sale	(200)	
purchase 1	350	£22
sale	(80)	
purchase 2	250	£16
sale	(270)	
purchase	50	£12
closing stock (units)	<u>950</u>	

AVCO:

STOCK MOVEMENTS	units in/(out)		unit cost	£
opening stock	850	@	£10.00	= 8 500
sale	(200)	@	£10.00	= (2 000)
purchase 1	350	@	£22.00	= 7 700
total and average	1 000	<u>14 200</u> 1 000	= £14.20	14 200
sale	(80)	@	£14.20	= (1 136)
purchase 2	250	@	£16.00	= 4 000
total and average	1 170	<u>17 064</u> 1 170	= £14.58	17 064
sale	(270)	@	£14.58	= (3 938)
purchase 3	50	@	£12.00	= 600
closing stock	950	<u>13 726</u> 950	= £14.45	£13 726