

Practice Problems: Chapter 12, Inventory Management

Problem 1:

ABC Analysis		
Stock Number	Annual \$ Volume	Percent of Annual \$ Volume
J24	12,500	46.2
R26	9,000	33.3
L02	3,200	11.8
M12	1,550	5.8
P33	620	2.3
T72	65	0.2
S67	53	0.2
Q47	32	0.1
V20	30	0.1
		$\Sigma = 100.0$

What are the appropriate ABC groups of inventory items?

Problem 2:

A firm has 1,000 “A” items (which it counts every week, i.e., 5 days), 4,000 “B” items (counted every 40 days), and 8,000 “C” items (counted every 100 days). How many items should be counted per day?

ANSWERS

Problem 1:

ABC Groups			
Class	Items	Annual Volume	Percent of \$ Volume
A	J24, R26	21,500	79.5
B	L02, M12	4,750	17.6
C	P33, T72, S67, Q47, V20	800	2.9
			$\Sigma = 100.0$

Item P33 is a judgment call. It might be considered a B item by some organizations. However, the modern tendency is to move items to as low a level as possible thereby reducing inventory management costs.

Problem 2:

Item Class	Quantity	Policy	Number of Items to Count Per Day
A	1,000	Every 5 days	$1000/5 = 200/\text{day}$
B	4,000	Every 40 days	$4000/40=100/\text{day}$
C	8,000	Every 100 days	$8000/100=80/\text{day}$
			Total items to count: 380/day