## Days' sales in inventory = 365 days divided by the inventory turnover ratio

Calculation of the days' sales in inventory inc	ludes:			
Days in one year		365		
divided by the inventory turnover ratio		2.8	ITR	
= Days' sales in inventory		130.4	DSI	(365 / ITR)
or				
Calculation of the days' sales in inventory includes:				
Cost of goods sold for the year <u>2022</u>	\$	140,000	COGS	
Average cost of goods sold per day	\$	383.56	ACOGS	(COGS / 365)
Average inventory during the year	\$	50,000	AI	
= Days' sales in inventory		130.4	DSI	(AI / ACOGS)

The amounts used on this form are taken from Filled-In Form R0.

Notes:

**ITR** To compute the *inventory turnover ratio* see Form R8.

**DSI** The days' sales in inventory tells on average how many days of sales are in inventory. Some inventory items turn over many times during the year while others may not turn at all during the year.

Sometimes the amount of *sales* is used to compute the inventory turnover ratio instead of the cost of goods sold. This is not logical since the inventory amount is based on costs while the sales amount is based on selling prices. Hence, a calculation using sales will have an impact on the days' sales in inventory.

Al Since the average amount of inventory during the year is needed, you will need to look at the balance sheets throughout the year. If the amount of the inventory is approximately the same amount each month, a simple average of the amount at the beginning of the year and the amount at the end of the year will be adequate. If the amount of inventory varies significantly within the year, a 13-month average should be used. **See Form G3**.

If the inventory amount was \$45,000 at December 31, 2022 and it was \$55,000 at December 31, 2021 and the change occurred at a uniform rate, the simple average is \$50,000 (\$45,000 + \$55,000 = \$100,000 divided by 2).

Days' sales in inventory is also known as days to sell.