

## ASSIGNMENT 01

Mr. Usman and Ms. Hina have partnered to run a clothing retail shop named “Jester Fashion”, selling ready-made garments including Shirts, Trousers, and Jackets. The shop has been operational for the last six months [168 days]. They observed that on many days, they either overstock and face unsold inventory or understock and lose customers. To improve operations and profitability, they tracked inventory movement and customer data for selected days. Here's the data:

### Product – Shirt

Days	Stocked	Sold	Unsold	Customers
13	100 pcs	90 pcs	10 pcs	90
31	120 pcs	85 pcs	35 pcs	85
53	90 pcs	90 pcs	-	100
71	110 pcs	95 pcs	15 pcs	95

### Product - Trousers

Days	Stocked	Sold	Unsold	Customers
13	80 pcs	70 pcs	10 pcs	70
31	100 pcs	80 pcs	20 pcs	80
53	75 pcs	75 pcs	-	90
71	85 pcs	80 pcs	5 pcs	80

### Product - Jackets

Days	Stocked	Sold	Unsold	Customers
13	60 pcs	40 pcs	20 pcs	40
31	70 pcs	50 pcs	20 pcs	50
53	50 pcs	45 pcs	5 pcs	45
71	60 pcs	58 pcs	2 pcs	58

Unsold Shirts and Trousers are marked down at the end of the month and sold to wholesalers for Rs.300 and Rs.350 per unit, respectively. Unsold Jackets are stored for the winter season and not sold at a discount.

Selling Price and Cost Details (per unit):

	Products		
	Shirt	Trousers	Jackets
Sales	6%	5.5%	Rs.1,200
Cost	4%	4%	Rs.800

Other monthly fixed cost is Rs.450,000. Percentage is calculated as follow:

$$\frac{\text{Last 6 digits of Reg\#} + 1000}{10} \times \_ \%$$

For example, last six digits of registration number are 123456:

$$\frac{123456 + 1000}{10} \times 60\% = \text{Rs. 12,446}$$

You are required to calculate how much products should Jester Fashion stock on daily basis.