12.27)

$$Q = \sqrt{\frac{2DS}{H}} = \sqrt{\frac{2(2400)(10)}{3.33}} = 120\ units$$

			D=2400	S=10	H=3.33	
	order quantity	price	product cost = PD	ordering cost=(DS)/Q	holding cost =(Q/2)H	total
A	120	33.55	80520	200	199.8	80919.8
	150	32.35	77640	160	249.75	78049.75
	300	31.15	74760	80	499.5	75339.5
	500	30.75	73800	48	832.5	74680.5
B	120	34	81600	200	199.8	81999.8
	150	32.8	78720	160	249.75	79129.75
	300	31.6	75840	80	499.5	76419.5
	500	30.5	73200	48	832.5	74080.5
C	120	33.75	81000	200	199.8	81399.8
	200	32.5	78000	120	333	78453
	400	31.1	74640	60	666	75366
D	120	34.25	82200	200	199.8	82599.8
	200	33	79200	120	333	79653
	400	31	74400	60	666	75126

Vendor B with order quantity of 500 units should be selected, total cost = 74080.5 $ because it's the lowest.