

P 9.56 parts a & b

(a)  $POHR = \frac{\$ \text{total OH}}{\text{total machine hours}}$

in this case the OH has already been divided up by activity so sum the activities' cost to get the total OH.

$$= \frac{\$600,000 + \$5,500,000 + \$900,000 + \$1,000,000}{150,000 \text{ Mhs for Standard} + 100,000 \text{ Mhs for Deluxe}}$$

$$= \$32/\text{MH}$$

	Standard	Deluxe
Direct Materials	\$245,000	\$155,000
Direct labor	\$650,000	\$250,000
Applied mfg. OH	\$4,800,000 *	\$3,200,000
Total Product Cost	\$5,695,000	\$3,605,000
Units Produced	÷ 20,000	÷ 5,000
Unit Product Cost	\$284.75	\$721

\* ( $\$32/\text{MH} \times 150,000 \text{ Mhs}$ )

(b) First get activity rates

Activity	Cost	Total level of Cost Driver	Rate
Receiving	\$600,000	\$400,000 DM cost	150% of \$DM
Manufacturing	5,500,000	250,000 MHs	\$22/MH
Machine setup	900,000	200 setups	\$4,500/setup
Shipping	\$1,000,000	25,000 units shipped	\$40/unit

	Standard	Deluxe
Direct Materials	\$245,000	\$155,000
Direct labor	\$650,000	\$250,000
Activity Costs		
Receiving	367,500 <sup>a</sup>	232,500
Manufacturing	3,300,000 <sup>b</sup>	2,200,000
Machine setup	337,500 <sup>c</sup>	562,500
Shipping	800,000 <sup>d</sup>	200,000
Total Product Cost	\$5,700,000	\$3,600,000
Units Produced	÷ 20,000	÷ 5,000
Unit Product Cost	\$285	\$720

<sup>a</sup> (\$245,000 DM cost × 1.5) Unit Product Cost

<sup>b</sup> (150,000 MHs × \$22/MH)

<sup>c</sup> (75 setups × \$4,500/setup)

<sup>d</sup> (20,000 units × \$40/unit)