

Exercise 12-5 (20 minutes)

1. and 2.

End-of-year allocations of variable costs should be based on the *actual* level of activity multiplied by the *budgeted* rate. End-of-year allocations of fixed costs should be based on the same predetermined lump-sum amounts as at the beginning of the year. Actual costs in excess of (or less than) the budgeted rate for variable costs or the budgeted total fixed costs should not be allocated to the plants. Therefore, the allocations of transport services cost at the end of the year would be:

	<i>Northern Plant</i>	<i>Southern Plant</i>	<i>Total</i>
Variable costs:			
\$0.25 per ton × 130,000 tons...	\$ 32,500		
\$0.25 per ton × 50,000 tons		\$ 12,500	\$ 45,000
Fixed costs:			
70% × \$300,000.....	210,000		
30% × \$300,000.....		<u>90,000</u>	<u>300,000</u>
Total cost	<u>\$242,500</u>	<u>\$102,500</u>	<u>\$345,000</u>

3. Part of the \$364,000 in total cost will not be allocated to the plants, as follows:

	<i>Variable Cost</i>	<i>Fixed Cost</i>	<i>Total</i>
Total cost incurred	\$54,000	\$310,000	\$364,000
Total cost allocated (above)	<u>45,000</u>	<u>300,000</u>	<u>345,000</u>
Amount of cost not allocated	<u>\$ 9,000</u>	<u>\$ 10,000</u>	<u>\$ 19,000</u>

The cost not allocated represents cost incurred in excess of the budgeted \$0.25 per ton variable cost and budgeted \$300,000 in fixed costs. This \$19,000 in unallocated cost is the responsibility of the Transport Services Department and is a cost variance for the year.