Problem 9-1A: Allocation of building occupancy costs to departments L.O. C3

National Bank has several departments that occupy both floors of a two-story building. The departmental accounting system has a single account, Building Occupancy Cost, in its ledger. The types and amounts of occupancy costs recorded in this account for the current period follow:

Depreciation—Building	$	22,500
Interest—Building mortgage		33,750
Taxes—Building and land		10,000
Gas (heating) expense		3,125
Lighting expense		3,750
Maintenance expense		6,875
Total occupancy cost	$	80,000

The building has 5,000 square feet on each floor. In prior periods, the accounting manager merely divided the $80,000 occupancy cost by 10,000 square feet to find an average cost of $8 per square foot and then charged each department a building occupancy cost equal to this rate times the number of square feet that it occupied.

Diane Linder manages a first-floor department that occupies 1,100 square feet, and Juan Chiro manages a second-floor department that occupies 1,900 square feet of floor space. In discussing the departmental reports, the second-floor manager questions whether using the same rate per square foot for all departments makes sense because the first-floor space is more valuable. This manager also references a recent real estate study of average local rental costs for similar space that shows first-floor space worth $30 per square foot and second-floor space worth $20 per square foot (excluding costs for heating, lighting, and maintenance).

Requirement 1:

Allocate all occupancy costs to the Linder and Chiro departments using the current allocation method. **(Round your answer to the nearest whole number. Omit the "$" sign in your response.)**

Department	Square Footage	Rate	Total
Linder's Dept.		$	$
Chiro's Dept.			$

Requirement 2:

(a) Allocate the depreciation, interest, and taxes occupancy costs to the Linder and Chiro departments in proportion to the relative market values of the floor space. **(Round your answers to the nearest whole number. Omit the "$" sign in your response.)**

Floor	Market Value	% of Total	Allocated Cost
First Floor	$	%	$
Second Floor			$

(b) Allocate the heating, lighting, and maintenance costs to the Linder and Chiro departments in proportion to the square feet occupied (ignoring floor space market values). **(Round your answer to the nearest dollar amount. Round the rate to two decimal places. Omit the "$" sign in your response.)**

Usage-based costs allocation rate $ [   ] per sq. ft

(c) What is the total cost allocated to each department based on value and usage?

Floor	Value Per Sq. Ft.	Usage Per Sq. Ft.	Total Per Sq. Ft.
First floor	$	$	$
Second floor			$

Department	Square Footage	Rate	Total
Linder's Department		$	$
Chiro's Department			$