### **EXERCISE 1**

Harmon Household Products, Inc., manufactures a number of consumer items for general household use. One of these products, a chopping board, requires an expensive hardwood. During a recent month, the company manufactured 4,000 chopping boards using 11,000 board feet of hardwood. The hardwood cost the company \$18,700. The company's standards for one chopping board are 2.5 board feet of hardwood, at a cost of \$1.80 per board foot.

## Required:

- 1. What cost for wood should have been incurred to make 4,000 chopping blocks? How much greater or less is this than the cost that was incurred?
- 2. Break down the difference computed in (1) above into a materials price variance and a materials quantity variance.

#### **EXERCISE 2**

AirMeals, Inc. prepares in-flight meals for a number of major airlines. One of the company's products is stuffed cannelloni with roasted pepper sauce, fresh baby corn, and spring salad. During the most recent week, the company prepared 6,000 of these meals using 1,150 direct labor-hours. The company paid these direct labor workers a total of \$11,500 for this work, or \$10 per hour. According to the standard cost card for this meal, it should require 0.20 direct labor-hours at a cost of \$9.50 per hour.

# Required:

- 1. What direct labor cost should have been incurred to prepare 6,000 meals? How much does this differ from the actual direct labor cost?
- 2. Break down the difference computed in (1) above into a labor rate variance and a labor efficiency variance.

#### **EXERCISE 3**

Order Up, Inc. provides order fulfillment services for dot.com merchants. The company maintains warehouses that stock items carried by its dot.com clients. When a client receives an order from a customer, the order is forwarded to Order Up, which pulls the item from storage, packs it, and ships it to the customer. The company uses a predetermined variable overhead rate based on direct labor-hours. In the most recent month, 140,000 items were shipped to customers using 5,800 direct labor hours. The company incurred a total of \$15,950 in variable overhead costs. According to the company's standards, 0.04 direct labor-hours are required to fulfill an order for one item and the variable overhead rate is \$2.80 per direct labor-hour.

## Required:

- 1. What variable overhead cost should have been incurred to fill the orders for the 140,000 items? How much does this differ from the actual variable overhead cost?
- 2. Break down the difference computed in (1) above into a variable overhead spending variance and a variable overhead efficiency variance.

#### **EXERCISE 4**

Sonne Company produces a perfume called Whim. The direct materials and direct labor standards for one bottle of Whim are given below:

	Standard Quantity or Hours	Standard Price or Rate	TO SECURE AND ADDRESS OF THE PARTY OF THE PA
Direct materials	7.2 ounces	\$2.50 per ounce	\$18.00
	0.4 hours	\$10.00 per hour.	\$4.00

During the most recent month, the following activity was recorded: a. Twenty thousand ounces of material were purchased at a cost of \$2.40 per ounce. b. All of the material was used to produce 2,500 bottles of Whim. c. Nine hundred hours of direct labor time were recorded at a total labor cost of \$10,800.

# Required:

- 1. Compute the direct materials price and quantity variances for the month.
  - 2. Compute the direct labor rate and efficiency variances for the month.