

	Standard Cost per Unit	Actual Cost per Unit
Direct materials:		
Standard: 1.80 feet at \$3.00 per foot	\$ 5.40	
Actual: 1.75 feet at \$3.20 per foot		\$ 5.60
Direct labor:		
Standard: 0.90 hours at \$18.00 per hour	16.20	
Actual: 0.95 hours at \$17.40 per hour		16.53
Variable overhead:		
Standard: 0.90 hours at \$5.00 per hour	4.50	
Actual: 0.95 hours at \$4.60 per hour		4.37
Total cost per unit	<u>\$26.10</u>	<u>\$26.50</u>
Excess of actual cost over standard cost per unit		\$0.40

The production superintendent was pleased when he saw this report and commented: "This \$0.40 excess cost is well within the 2% limit management has set for acceptable variances. It's obvious that there's not much to worry about with this product."

Actual production for the month was 12,000 units. Variable overhead cost is assigned to products on the basis of direct labor-hours. There were no beginning or ending inventories of materials.

Required:

- Compute the following variances for May:
 - Materials price and quantity variances.
 - Labor rate and efficiency variances.
 - Variable overhead rate and efficiency variances.
- How much of the \$0.40 excess unit cost is traceable to each of the variances computed in (1) above.
- How much of the \$0.40 excess unit cost is traceable to apparent inefficient use of labor time?
- Do you agree that the excess unit cost is not of concern?

PROBLEM 11-13 Materials and Labor Variances; Computations from Incomplete Data

[LO 11-1, LO 11-2]

Topaz Company makes one product and has set the following standards for materials and labor:

	Direct Materials	Direct Labor
Standard quantity or hours per unit . . .	? pounds	2.5 hours
Standard price or rate	? per pound	\$9.00 per hour
Standard cost per unit	?	\$22.50

During the past month, the company purchased 6,000 pounds of direct materials at a cost of \$16,500. All of this material was used in the production of 1,400 units of product. Direct labor cost totaled \$28,500 for the month. The following variances have been computed:

Materials quantity variance	\$1,200 U
Total materials spending variance	\$300 F
Labor efficiency variance	\$4,500 F

Required:

- For direct materials:
 - Compute the standard price per pound for materials.
 - Compute the standard quantity allowed for materials for the month's production.
 - Compute the standard quantity of materials allowed per unit of product.