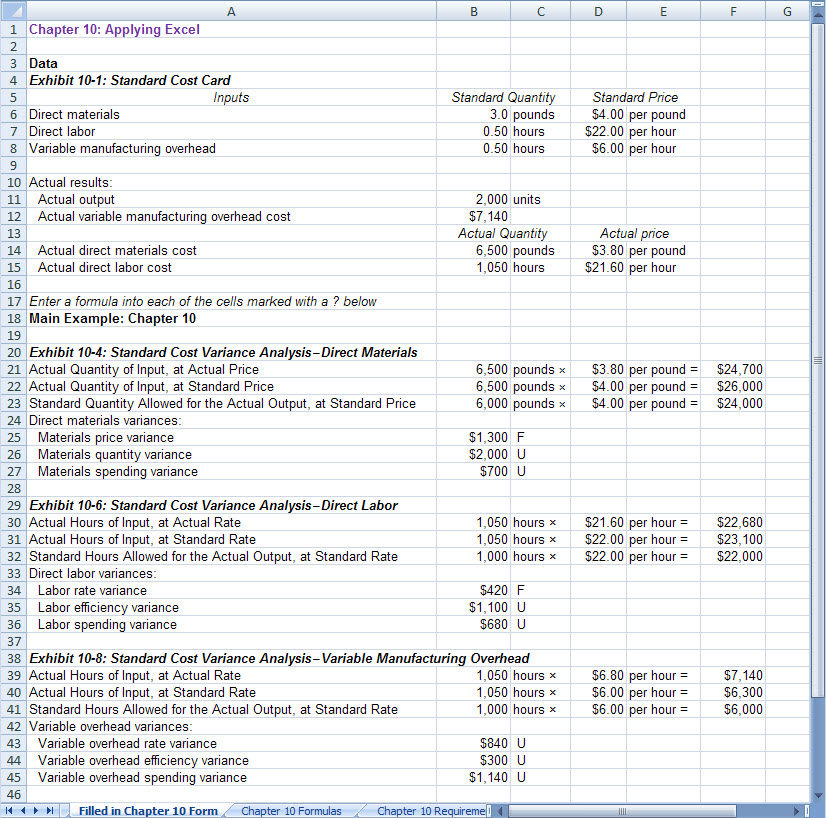
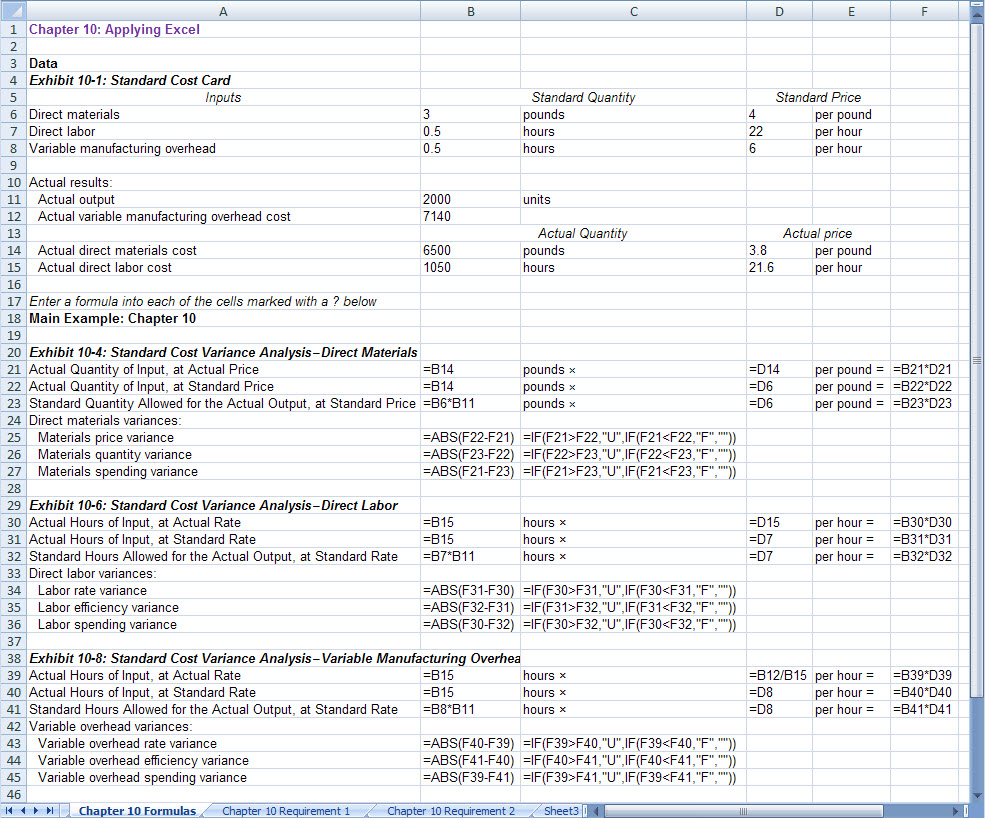
Chapter 10: Applying Excel

The completed worksheet is shown below.

****

Chapter 10: Applying Excel (continued)

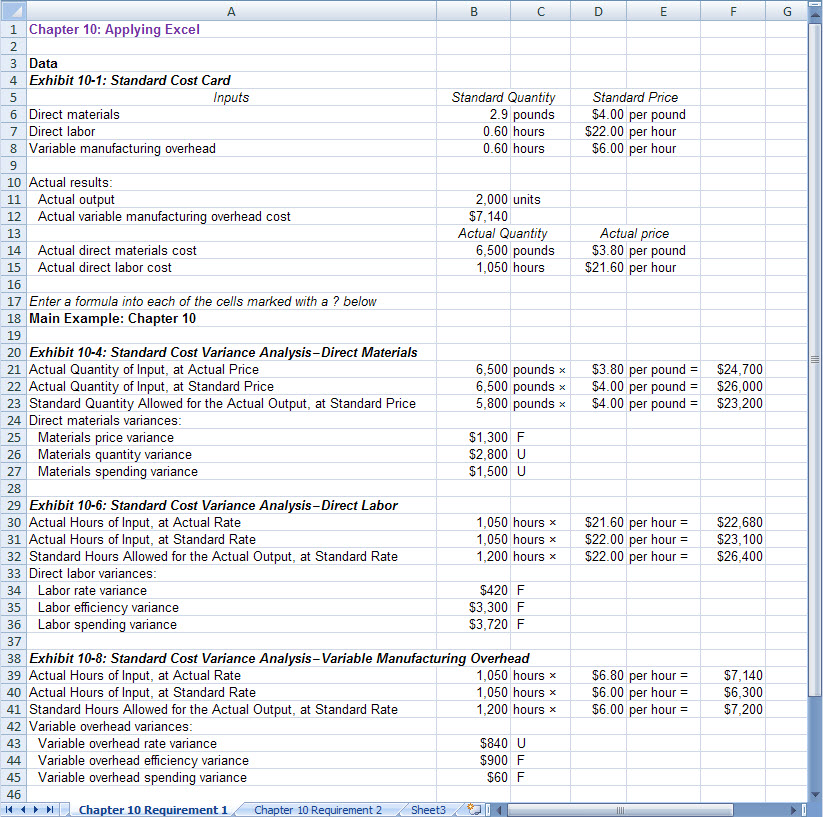
The completed worksheet, with formulas displayed, is shown below.

****

Note: The formulas for to compute whether a variance is Favorable or Unfavorable use the IF() function. For example, in cell C26, the formula is =IF(F22>F23,"U",IF(F22<F23,"F","")). This formula first checks whether the actual quantity of input at the standard price (cell F22) exceeds the standard quantity allowed for the actual output at the standard price (cell F23). If it does, the function returns the value U, which is displayed in cell C26. Otherwise, the formula checks whether the standard quantity allowed for the actual output at the standard price (cell F23) exceeds the actual quantity of input at the standard price (cell F22). If it does, the function returns the value F, which is displayed in cell C26. Otherwise, nothing is displayed in cell C26.

Chapter 10: Applying Excel (continued)

1. With the changes in data, the result is:

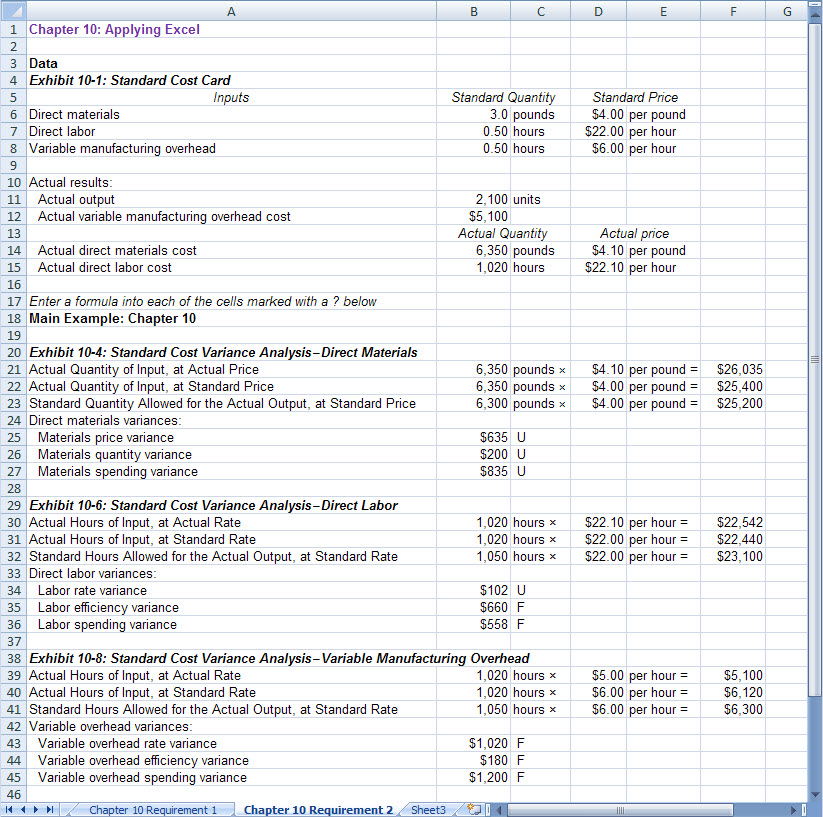
****

a. The materials quantity variance is $2,800 U. This variance is the difference between the amount of materials that should have been used to make the actual output and the actual amount of materials used, all evaluated at the standard price. This variance is unfavorable because 6,500 pounds were used, but 5,800 pounds should have been used.

b. The labor rate variance is $420 F. This variance is the difference between the standard labor rate and the actual labor rate, multiplied by the actual labor hours. It is favorable because the actual labor rate was $21.60 per hour, whereas the standard labor rate was $22.00 per hour.

Chapter 10: Applying Excel (continued)

2. With the revised data, the worksheet should look like this:

****

Parts a, b, and c:

|  |  |  |
| --- | --- | --- |
| Materials price variance | $635 | U |
| Materials quantity variance | $200 | U |
| Labor rate variance | $102 | U |
| Labor efficiency variance | $660 | F |
| Variable overhead rate variance | $1,020 | F |
| Variable overhead efficiency variance | $180 | F |