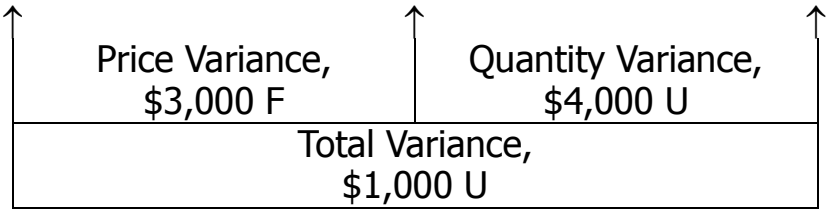
Exercise 10-10 (20 minutes)

1.

Actual Quantity of Input, at Actual Price (AQ × AP)	Actual Quantity of Input, at Standard Price (AQ × SP)	Standard Quantity Allowed for Output, at Standard Price (SQ × SP)
20,000 pounds × $2.35 per pound = $47,000	20,000 pounds × $2.50 per pound = $50,000	18,400 pounds* × $2.50 per pound = $46,000



*4,000 units × 4.6 pounds per unit = 18,400 pounds

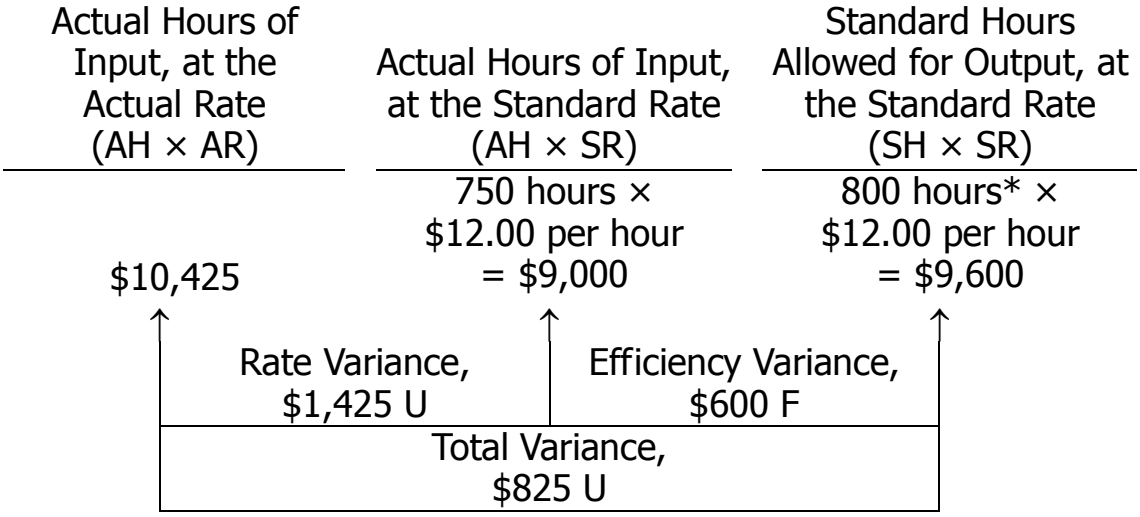
Alternatively:

Materials price variance = AQ (AP – SP)
20,000 pounds ($2.35 per pound – $2.50 per pound) = $3,000 F

Materials quantity variance = SP (AQ – SQ)
$2.50 per pound (20,000 pounds – 18,400 pounds) = $4,000 U

Exercise 10-10 (continued)

2.



*4,000 units × 0.2 hours per unit = 800 hours

Alternatively:

Labor rate variance = AH (AR – SR)
750 hours ($13.90 per hour* – $12.00 per hour) = $1,425 U

*10,425 ÷ 750 hours = $13.90 per hour

Labor efficiency variance = SR (AH – SH)
$12.00 per hour (750 hours – 800 hours) = $600 F