

Direct material (3 pounds at P3.20)	P9.60
Labor standard (0.9 hours at P9.00)	8.10
Variable overhead (0.9 hours at P1.50)	1.35
Fixed overhead (0.9 hours at P4.00)	3.60
Total	<u>P22.65</u>

Units produced	140,000 units
Materials purchased	421,175 lbs. at P3.30
Materials used	421,000 lbs.
Direct labor	128,750 hrs at P8.90
Fixed overhead	P517,525
Variable overhead	218,000

**Answer:**

**1. Material purchase price variance**

**Actual Quantity of Input at Actual Price  
(AQ x AP)**

$$421,175 \text{ lbs} \times P3.30 \\ = 1,389,877.5$$

**Actual Quantity of Input at Standard Price  
(AQ x SP)**

$$421,175 \text{ lbs} \times P3.20 \\ = P1,347,760$$

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MPPV P42,117.5 unfavorable

**2. Material price usage variance**

**Actual Quantity of Input at Actual Price  
(AQ x AP)**

$$421,000 \text{ lbs} \times P3.30 \\ = 1,389,300$$

**Actual Quantity of Input at Standard Price  
(AQ x SP)**

$$421,000 \text{ lbs} \times P3.20 \\ = P1,347,200$$

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MPOV P42,100 unfavorable

**3. Material quantity variance in MPPV**

**Actual Quantity of Input at Standard Price  
(AQ x SP)**

$$421,175 \text{ lbs} \times P3.20 \\ = P1,347,760$$

**Standard Quantity Allowed for  
Actual Output at Standard Price (SQ x SP)**

$$\text{SQ} = 140,000 \text{ units} \times 3 \text{ lbs} = 420,000 \\ 420,000 \text{ lbs.} \times P3.20 \\ = P1,344,000$$

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MQV P3,760 unfavorable

**Material quantity in MPOV**

**Actual Quantity of Input at Standard  
Price  
(AQ x SP)**

$$421,000 \text{ lbs} \times P3.20 \\ = P1,347,200$$

**Standard Quantity Allowed for  
Actual Output at Standard Price (SQ x SP)**

$$\text{SQ} = 140,000 \text{ units} \times 3 \text{ lbs} = 420,000 \\ 420,000 \text{ lbs.} \times P3.20 \\ = P1,344,000$$

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MQV P3,200 unfavorable

**4. Labor rate variance**

**Actual Hours of Input at Actual Rate  
(AH x AR)**

128,750 hrs x P8.90  
= P1,145,875

**Actual Hours of Input at Standard Rate  
(AH x SR)**

128,750 hrs x P9.00  
= P1,158,750

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LRV P12,875 favorable

**5. Labor efficiency variance**

**Actual Hours of Input at Standard  
Rate  
(AH x SR)**

128,750 hrs x P9.00  
= P1,158,750

**Standard Hours Allowed for  
Actual Output at Standard Rate (SH x SR)**

SQ= 140,000units x 0.9hrs/unit = 126,000 hrs  
126,000 hrs. x P9.00  
=P1,134,000

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LEV P24,750 unfavorable

**6. Variable overhead rate variance**

**Actual Hours of Input at Actual Rate  
(AH x AR)**

P218,000

**Actual Hours of Input at Standard Rate  
(AH x SR)**

128,750 hrs x P1.5  
= P193,125

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VOH rate variance (VRV) P24,875 unfavorable

**7. Variable overhead efficiency variance**

**Actual Hours of Input at Standard  
Rate  
(AH x SR)**

128,750 hrs x P1.5  
= P193,125

**Standard Hours Allowed for Actual Output at  
Standard Rate  
(SH x SR)**

126,000hrs x P1.5  
=P189,000

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VOH efficiency variance (VEV) P4,125 favorable

**8. Fixed spending variance**

**Actual Hours of Input at Actual Rate  
(AH x AR)**

P517,525

**Budgeted Fixed Overhead (Budgeted  
Capacity x SR)**

144,00 hrs x P4  
= P576,000

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FOH spending variance (FSV) P58,475 favorable

**9. Fixed volume variance**

**Budgeted Fixed Overhead (Budgeted  
Capacity x SR)**

144,00 hrs x P4  
= P576,000

**Standard Hours Allowed for Actual Output at  
Standard Rate  
(SH x SR)**

126,000 hrs x P4  
=P504,000

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FOH volume variance (FVV) P72,000 unfavorable

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