EXPLAIN HOW PROPERTY TAXES ARE COMPUTED IN CALIFORNIA UNDER PROPOSITION 33.

1. **Current Value:** $1,500
2. **Growth:** +25% per year
3. **Formula:** Current Value + Growth

EXPLAIN THE HOPE AND LIFETIME EDUCATION LEARNING CREDITS.

**Hope Credit:** Freshmen sophomores - 2 years each
- 260/yr x 2 yrs = $520
- up to $1,500 tax credit in 200 appt
- needs to apply

**Lifelong Learning Credit:**
- 200 x 5 = $1,000

**Cost:**
- **Single:** $40 - $80
- **Joint:** $80 - $100

*Testing & related expenses*
108. Calculate the unknowns for the following situations based on the data below. All situations are independent of each other.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fixed costs</td>
<td>$200,000</td>
</tr>
<tr>
<td>Unit sale price</td>
<td>$100</td>
</tr>
<tr>
<td>Unit variable cost</td>
<td>$40</td>
</tr>
</tbody>
</table>

a) Calculate the break-even point in units.
b) Calculate the break-even point in dollar sales.
c) Assume the unit sale price increases by 10%. Other data is unchanged. Calculate the break-even point in units.
d) Assume the unit variable cost increases by 10%. Other data is unchanged. Calculate the break-even point in units.
e) Assume total fixed costs increase by $5,000. Other data is unchanged. Calculate the break-even point in units.

**Solution:**

- a) $200,000/$60 = 3,333
- b) $200,000/$60 = $3,333.33
- c) $100 x 1.10 = $110, $110 - $40 = $70, $200,000/$70 = 2,857
- d) $40 x 1.10 = $44, $100 - $44 = $56, $200,000/$56 = 3,571
- e) $205,000/$60 = 3,417

101. Future Enterprises produces and sells a part used in the production of automobiles. The unit costs associated with this part are as follows:

- Direct materials: $1.15
- Direct labor: $.30
- Variable manufacturing overhead: $.25
- Fixed manufacturing overhead: $.10
- Total cost: $1.80

Jupiter Company has approached Future Enterprises with an offer to purchase 20,000 units of this part at a price of $72. Accepting this special sales order will put idle manufacturing capacity to use and will not affect regular sales. Total fixed costs will not change.

Determine whether or not the special order should be accepted. Justify your conclusion.

**Solution:**

Variable manufacturing expenses per unit:

\[\text{Variable manufacturing expenses per unit} = 1.15 + 0.30 + 0.25 = 1.70\]

\[\text{Increase in operating income} = 72 - 70 = 2.02\text{unit} \times 20,000\text{ units} = 400\text{ increase in operating income}\]

Points to consider:
- Total fixed costs will not change
- Idle capacity exists
- No affect on regular sales

Future Enterprises should accept the offer as this would increase operating income by $400.
102. Electronics Inc., has two departments, X and Y. Overhead is allocated based on direct labor cost in Department X and direct labor hours in Department Y. The following additional information is available:

<table>
<thead>
<tr>
<th>Estimated Amounts</th>
<th>Department X</th>
<th>Department Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct labor cost</td>
<td>$245,000</td>
<td>$195,000</td>
</tr>
<tr>
<td>Direct labor hours</td>
<td>50,000</td>
<td>45,000</td>
</tr>
<tr>
<td>Manufacturing overhead costs</td>
<td>$294,000</td>
<td>$247,500</td>
</tr>
</tbody>
</table>

Actual data for completed Job No. 140 is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Department X</th>
<th>Department Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct materials requisitioned</td>
<td>$23,700</td>
<td>$48,600</td>
</tr>
<tr>
<td>Direct labor cost</td>
<td>$31,400</td>
<td>$22,000</td>
</tr>
<tr>
<td>Direct labor hours</td>
<td>4,300</td>
<td>3,800</td>
</tr>
</tbody>
</table>

a) Compute the predetermined manufacturing overhead rate for Department X.

b) Compute the predetermined manufacturing overhead rate for Department Y.

c) What is the total manufacturing overhead cost for Job No. 140?

d) If Job No. 140 consists of 350 units of product, what is the average unit cost of this job?

\[
\begin{align*}
\text{a) } & \frac{294,000}{245,000} = 1.20 \text{ or } DL \\
\text{b) } & \frac{247,500}{45,000} = 5.50 \text{ or } DL \\
\text{c) } & \frac{31,400 \times 1200}{524} = \$37,640 \\
\text{d) } & \frac{23,700 + 31,400 + 37,640 + 48,600 + 22,000 + 20,900}{350} = \$529.29
\end{align*}
\]
107. Blankenship & Jones Company began operations on June 1 by starting 60,000 units of product in process in the Assembly Department. Total costs incurred during June were $347,115 of direct materials and $294,516 of conversion costs. At June 30, 7,000 units remained in work in process, 65% complete as to direct materials and 35% complete as to conversion costs.

Compute:
- a) equivalent units for direct materials
- b) equivalent units for conversion costs
- c) cost per equivalent unit for direct materials
- d) cost per equivalent unit for conversion costs

Solution:

a) \[ 43,000 + (7,000 \times 0.65) = 47,350 \]
b) \[ 43,000 + (7,000 \times 0.35) = 47,350 \]
c) \[ \frac{347,115}{47,350} = \$7.30 \]
d) \[ \frac{294,516}{47,350} = \$6.22 \]

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113. Best Bet Company uses straight-line depreciation and is considering a capital expenditure for which the following relevant data have been estimated:

<table>
<thead>
<tr>
<th>Estimated useful life</th>
<th>3 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial investment</td>
<td>$410,000</td>
</tr>
<tr>
<td>Amount of annual savings in cash operating expenses:</td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>150,000</td>
</tr>
<tr>
<td>Year 2</td>
<td>125,000</td>
</tr>
<tr>
<td>Year 3</td>
<td>175,000</td>
</tr>
<tr>
<td>Residual value after three years</td>
<td>20,000</td>
</tr>
</tbody>
</table>

Compute the accounting rate of return for the investment.

Solution:

Average annual cash inflow:
\[ 150,000 + 125,000 + 175,000 = \frac{450,000}{3} = \$150,000 \]

Annual depreciation:
\[ \frac{410,000 - 20,000}{3} = \$130,000 \]

ARR:
\[ \frac{150,000 - 130,000}{(410,000 + 20,000)/2} = 9.3\% \]
103. Indicate whether each of the following costs is a product cost or a period cost:

- a) salespersons’ commissions
- b) factory utilities
- c) direct materials used
- d) indirect labor incurred
- e) indirect materials used
- f) depreciation on store equipment
- g) salary of plant manager
- h) factory machinery repairs and maintenance
- i) direct labor incurred
- j) advertising expense
- k) plant insurance expired
- l) store supplies used
- m) depreciation on factory machinery

102. Given the following products or services, identify which costing system would be more appropriate, job costing, or process costing:

Solution:

1. airplanes 1. job costing
2. cereal 2. process costing
3. automobiles 3. process costing
4. office buildings 4. job costing
5. light bulbs 5. process costing
6. personal computers 6. process costing
7. custom kitchen cabinets 7. job costing
8. cellular telephones 8. process costing
9. swimming pools 9. job costing
10. surgical operation 10. job costing

This test was...