Depreciation Methods

Straight-line
- \[ \text{(Cost – Residual Value)} / \text{# of periods} = \text{depreciation expense per period of use} \]
- Example:
  - Asset cost: $12000
  - Residual value: $2000
  - Life of asset: 10 years

  \[ \text{Depreciation expense per year} = (\$12,000 - \$2,000)/10 = \$1,000 \]

<table>
<thead>
<tr>
<th>JE:</th>
<th>Depreciation expense</th>
<th>$1000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Accumulated Depreciation</td>
<td>$1000</td>
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</tbody>
</table>

- The depreciation expense is the Income Statement expense for all depreciable assets
- Accumulated Depreciation is asset-specific and is a contra account set off against the cost of the individual asset on the Balance Sheet

Declining balance
- Don’t take into consideration residual value until the end
- Total cost multiplied by \((1/\text{estimated life}) \times 2\)
- Apply \((1/\text{estimated life}) \times 2\) to a declining balance
- At the end, don’t let the balance fall below residual value
- Using same information above:
  \[ \$12000 \times (1 \text{ divided by } 10 \text{ (years)} \times \text{times } 2) = \$2400 \text{ (1st yr. expense)} \]
  \[ \$12000 \text{ less } \$2400 \times \text{times } 1/5 \text{ (2nd yr. expense)} \]

Activity or units of production
- Take the cost less the salvage value and divide by the estimated units of production the asset is capable of during its life → this is the rate
- Every year, take this rate and multiply by the actual year’s output
- Using the same information above, assume that the asset can produce 20000 units.
  The depreciation expense per unit is:
  \[ \$12000 \text{ - } \$2000 = \$10000 \text{ divided by } 20000 = \$0.50 \text{ per unit} \]
  \[ 1\text{st year’s production} = 3000 \text{ units } \times \$0.50 = \$1500 \text{ depreciation expense} \]

Sum of the year’s digits
- An accelerated method; the rate is # of years left divided by the sum of the year’s digits
- Example: for a 5 year life, the rate for the 1st year is:
  \[ \text{5 divided by } 5+4+3+2+1 \text{ or } 5/15 \]
  - The 2nd year’s rate is 4/15 and so on