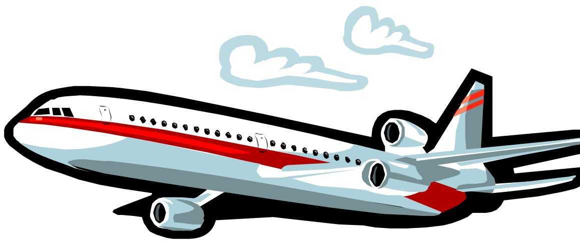
Module 5 - Nature of Long-Lived Operating Assets



- Plant, Property and Equipment
  - Tangible
  - Long-lived
  - Acquired for use in business operations
  - i.e. land, buildings, machinery, equipment, furniture
- Intangible Assets
  - Do Not have physical substance
  - Long-lived
  - Acquired for use in business operations
  - i.e. licenses, patents, franchise, and goodwill
  - copyrights

Typical Tangible or Plant Assets Accounts

- Balance Sheet Accounts
  - Land
  - Buildings
  - Equipment
  - Depreciation – Equipment
  - Depreciation – Building
- Income Statement Accounts
  - Depreciation Expense

Acquiring Long-Term Operating Assets

- Capital Budgeting
  - Systematic process of evaluating a long-term project
  - Takes into consideration the time value of money
    - Concept that a dollar received now is worth more than a dollar received far in the future
    - More detail in Chapter 10

Acquisition

- Assets Acquired by Purchase
- Assets Acquired by Leasing
  - Operating lease
    - A simple rental agreement
  - Capital lease
    - Long-term agreement

Purchase of Long-term Asset Problem

The following expenditures were incurred by Valentino Company in purchasing land: cash price $50,000; accrued taxes $7,000; attorney's fees $2,500; real estate broker's commission $2,800; and clearing and grading $3,500. What is the cost of the land?

$65,800

Land	$65,800	
Cash		$65,800

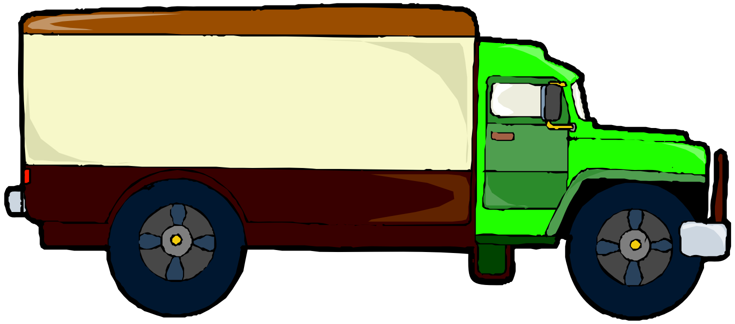
Note: purchased land for new office building

Purchase of Long-term Asset problem 2

Hector Gonzales Company incurs these expenditures in purchasing a truck: cash price $18,000; accident insurance (during use) $2,000; sales taxes $900; motor vehicle license $300; and painting and lettering $1,200. What is the cost of the truck?

$20,400

Truck	$20,400	
Cash		$20,400



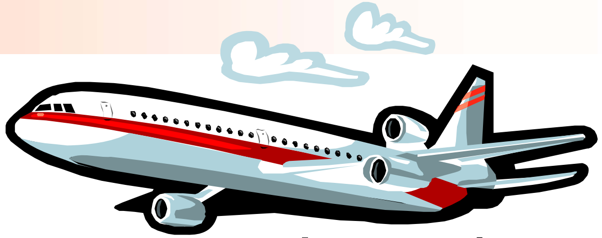
Note: purchased truck for business

Acquisition

- Classifying Leases
  - If a lease is non-cancelable and meets one of the following…
    - Lease transfers ownership of the leased asset to the lessee by the end of the lease term
    - Lease contains an option allowing the lessee to purchase the asset at the end of the lease term at a bargain price
    - Lease term is equal to 75% or more of the estimated economic life of the asset
    - Present Value (PV) of the lease payments at the beginning of the lease is 90% or more of the fair market value of the leased asset

....It is a capital lease

Lease Problem



Jerry Michaels Jewelers on January 1, 2004 leased a copy machine from Hanks Office Supply. The 5 year lease is non-cancelable and requires monthly payments of $150 at the end of the month, with the first payment due on January 31, 2004. At the end of 5 years, Jerry Michaels Jewelers will own the equipment. The present value of the lease payments at the beginning of the lease is determined to be $6,740.

1. Prepare Journal entries to record:
    a. The lease agreement on January 1, 2004
    b. The first lease payment on January 31, 2004, assuming that $68 of the $150 payment is interest.
2. Now assume that the lease expires after one year at which time a new lease can be negotiated or Jerry Michaels can return the equipment. Prepare Journal entries relating to the lease that would be required on January 1 and January 31.

Lease Solution

Classified Lease journal entries

1/1/04	Leased Asset	$6,740	
	Lease Liability		$6,740

Note: leased copy machine from Hank Office

1/31/04	Interest Expense	$ 68	
	Lease Liability	$ 82	
	Cash		$ 150

Note: first lease payment of copy machine from Hank Office

Operating Lease journal entries

1/1/04 NO ENTRY

1/31/04	Lease Expense	$ 150	
	Cash		$ 150

Note: lease payment on copy machine from Hank Office

Acquisition

- Acquired by Self Construction
  - Include costs from
    - Materials
    - Labor
    - Overhead
    - Capitalized Interest
      - interest cost associated with money borrowed to finance the construction project

Self Construction of Building problem

Luther Jones LTD is constructing a new office building. Costs of the Building are as follows:

- wages paid to construction workers $185,000
- building materials purchased $456,000
- Interest expense on construction loan $13,800
- Interest expense on mortgage loan during the first year subsequent to the building's completion $22,000

Given the above costs, at what amount should the building be recorded in the accounting records?

$654,800

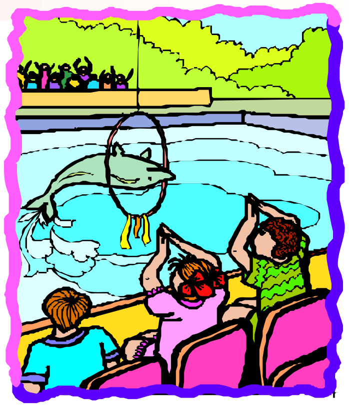
Acquisition

- Acquiring Several assets at the same time
  - Basket Purchase
    - Purchase of two or more assets acquired together at a single price

Basket Purchase problem

Waterpark Corp. purchased land, a building, and equipment for a total cost of $450,000. After the purchase, the property was appraised. Fair market values were determined to be $120,000 for the land, $280,000 for the building, and $80,000 for the equipment. Given these appraisals, record the purchase of the property by Waterpark Corp.

Basket Purchase solution



	Appraisal Value	% of Total	Cost Value
Land	$120,000	25.00	$112,500
Building	$280,000	58.33	$262,485
Equipment	$ 80,000	16.67	$ 75,015
Total	$480,000	100.00	$450,000

Basket Purchase solution

Land	$112, 500	
Building	$262,485	
Equipment	$ 75,015	
Cash		$450,000

Note: purchased property and equipment

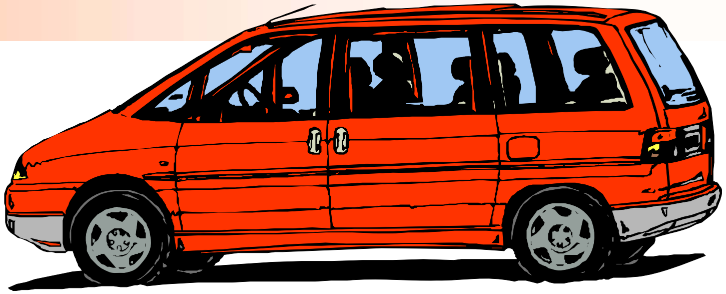
Depreciation

- Definition – allocation of an assets cost over its useful life
- Methods
  - Straight-Line
  - Double Declining Balance
  - Units of Activity

Depreciation

- Straight-Line Depreciation Method
  - (Cost – Salvage Value)/Estimated Useful life (yrs)
- Units of Activity Method
  - (Cost – Salvage Value)/Total Est. life in units
  - i.e hours or miles
- Declining-Balance Method
  - (Cost – accumulated depreciation) X (straight-line rate X 2)

Depreciation



- Straight Line

  Cats Meow purchased a new mini-van on July 1, 2003, for $15,000. The estimated life of the van was 4 years, and its salvage value was estimated to be $2,000.

  Compute depreciation for 2003 and 2004

2003 - $1,625

2004 - $3,250

12/31/03	Depreciation Expense	$1,625	
	Accumulated Depreciation		$1,625

Note: Depreciation for mini van in 2003

Depreciation

- Units of Activity

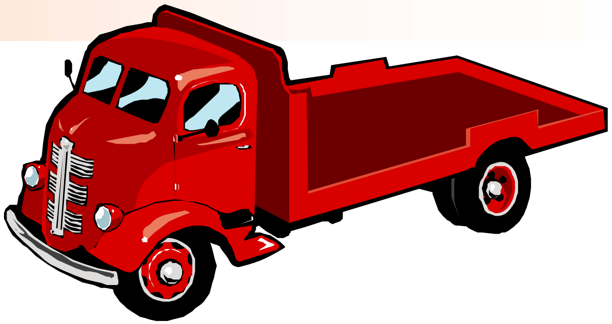
  Cats Meow purchased a new mini-van on July 1, 2003, for $15,000. The estimated life of the van was 104,000 miles, and its salvage value was estimated to be $2,000. The car was driven 9,000 miles in 2003 and 27,000 miles in 2004.

  Compute depreciation per year

2003 - $1,125

2004 - $3,375

Depreciation



- Double Declining Balance

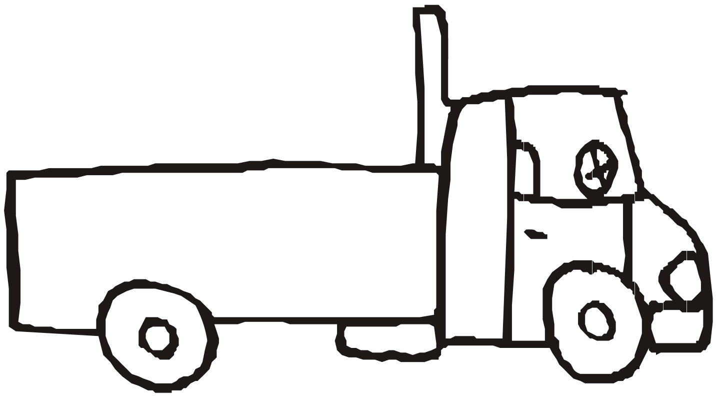
  Dan Fritz Construction purchased a new truck on January 1, 2002, for $30,000. The estimated life on the truck was 5 years, and its salvage value was estimated to be $2,000. Compute the depreciation for 2002, 2003, and 2004.

2003 ($30,000 – 0) X (0.20 X 2) equals $12,000

2004 ($30,000 – 12,000) (0.20 X 2) equals $7,200

2005 ($30,000 – 19,200)(0.20 X 2) equals $4,320

Depreciation



- Comparison of Methods
  - Income Taxes
    - Can have different tax methods for IRS and financial statements
  - Disclosure in the Notes
    - Depreciation method must be disclosed in financial statements
- Revising Estimates
    - Annual depreciation expense should be routinely reviewed

Repairing and Improvements

- Post acquisition expenditures
  - Two Types
    - Repairs, maintenance, and minor improvements
      - Expensed during current period because it typically will benefit on that accounting period
      - i.e. oil changes
    - Improvements
      - Extends asset's useful life
      - Capitalize these expenditures
        - Added to the assets cost because the expenditure will benefit more than one accounting period

Recording Impairments

- Impairment
  - Decline in the value of a long-term operating asset
    - Reported as a reduction in the reported value of the income statement
    - Reported as a loss in the income statement
- Recording increases in property, plant and equipment value is not GAAP

Impairment problem

Omega Company purchased land and a building at cost of $800,000, of which $200,000 was allocated to the land and $600,000 was allocated to the building. As the December 31, 2002, the accounting records related to these assets were as follows:

Land $200,000; Building $600,000; and accumulated depreciation, Building $100,000.

On January 1, 2003 it is determined that there is toxic waste under the building and the future cash flows associated with the land and building are less than the recorded total book value for those two assets. The fair value of the land and building is now $100,000, of which $40,000 is land and $60,000 is the building. Record the impairment if any on January 1, 2003.

Impairment Solution

1/1/03	Loss on impairment	$600,000	
	Accumulated Depreciation	$100,000	
	Land		$160,000
	Building		$540,000

Note: impairment recorded on property

Land

200,000	160,000
40,000	

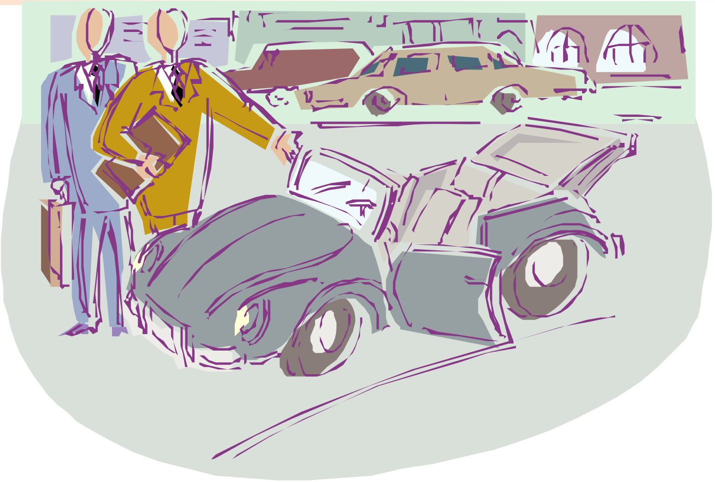
Building

600,000	540,000
60,000	

Accum Deprec

100,000	100,000
	0

Disposal



- Retirement or Discarding
  - Asset becomes worthless and must be scrapped
  - Cost and accumulated depreciation removed from the accounting records
- Selling
  - Gain or loss recorded
  - Cost and accumulated depreciation removed
- Exchange for another asset

Sale of asset – Gain

Zulu Construction has a truck that it wants to sell. The truck had an original cost of $60,000, was purchased 3 years ago, and was expected to have a useful life of five years with no salvage value.

Using Straight-line depreciation, and assuming that depreciation expense for three full years has been recorded, prepare journal entries to record the sale of the truck

Zulu sells the truck for $25,000 cash.

Sale of Asset – Gain solution

Depreciation

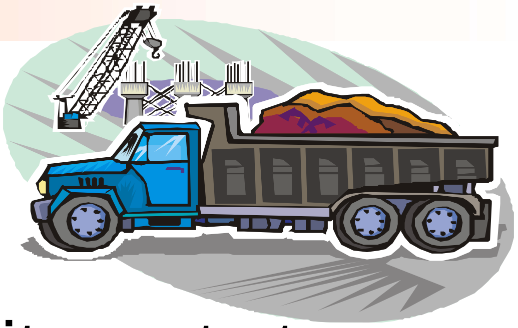
60,000 – 0/5 years equals 12,000 per year

12,000 X 3 years equals 36,000

Cash	$25,000	
Accumulated Depreciation	$36,000	
Truck		$60,000
Gain on Sale		$ 1,000

Note: sale of delivery truck

Sale of Asset – Loss



Zulu Construction has a truck that it wants to sell. The truck had an original cost of $60,000, was purchased 3 years ago, and was expected to have a useful life of five years with no salvage value.

Using Straight-line depreciation, and assuming that depreciation expense for three full years has been recorded, prepare journal entries to record the sale of the truck

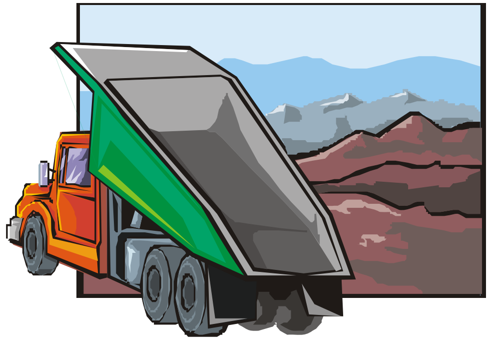
Zulu sells the truck for $20,000 cash

Sale of Asset – Loss solution

Depreciation

60,000 – 0/5 years equals 12,000 per year

12,000 X 3 years equals 36,000



Cash	$20,000	
Accumulated Depreciation	$36,000	
Loss on Sale	$ 4,000	
Truck		$60,000

Note: sale of delivery truck

Retirement of Assets -

Zulu Construction has a truck that it wants to sell. The truck had an original cost of $60,000, was purchased 3 years ago, and was expected to have a useful life of five years with no salvage value.

Using Straight-line depreciation, and assuming that depreciation expense for three full years has been recorded, prepare journal entries to record the sale of the truck

The old truck is wrecked and Zulu hauls it to the junkyard

Sale of Asset – Retirement solution

Depreciation

60,000 – 0/5 years equals 12,000 per year

12,000 X 3 years equals 36,000

Accumulated Depreciation	$36,000	
Loss on Retirement	$24,000	
Truck		$60,000



Note: scrapped delivery truck

Intangible Assets

- Patents
  - Exclusive right to produce and sell a commodity that has one or more unique features
  - Legal life of 20 years
  - Cost includes
    - Initial cost of patent
    - Legal costs in defending patent may be added to cost of patent
  - Amortize or expense over life of the patent

Intangible Assets

- Franchises and Licenses
  - Contractual agreement allowing franchisee the right to sell certain products or use certain trademarks
- Trademarks and Trade Names
  - Word, phrase, jingle or symbol
  - Distinguishes or identifies a company or product

Intangible Assets

- Research and Development
  - Usually recorded as expenses
  - Too much uncertainty in future benefits
- Goodwill
  - At purchase of an entire business it is the excess of cost over the fair market value of the net assets (assets less liabilities)
  - Not amortized as thought it has an indefinite life
  - Can be written down if permanent impairment is identified