

# 1) Building

- purchase price
- labour, direct materials, construction
- interest costs to fund construction (while asset still not ready for use)

# Equipment

- purchase price, tax, shipping, assembly, installation

2)

year	depr cost	annual depr amount	accumulated depr	book value
2016	400k	80k	80k	420k
2017			160k	340k
2018			240k	260k
2019			320k	180k

depreciation expense =  $\frac{500k - 100k}{5} = 80k$  → depr cost

BV = 600k - accum depr

3)

year	units activity	annual depr amount	accum depr	book value
2014	15K km	$15K \times 3.5 = 52.5K$	52.5k	347.5k
2015	9k km	$9K \times 3.5 = 31.5K$	84k	316k

depreciable cost per unit =  $\frac{400k - 50k}{100,000} = 3.5$

4)  $BV = \$800k$

$2/\text{useful life} = 0.125$

year	begin BV	2/useful life	depr exp	accum depr	end BV
2014	800k	0.125	$0.125(800k) = 100k$	100k	700k
2015	700k	0.125	$0.125(700k) = 87.5k$	187.5k	612.5k
2016	612.5k	0.125	$0.125(612.5k) = 76.6k$	264.1k	535.9k

5)  $BV \text{ after } 3 \text{ years} = \$600k - (3 \times 34.7k) = 496k$

old depr exp =  $(600k - 80k) / 15 = 34.7k$

remaining useful life =  $20 - 3 = 17 \text{ years}$

new depr exp =  $\frac{496k - 60k}{17} = 25.6k$

6)  $\text{depr exp} = (120k - 20k) / 15 = 6.7k$

$BV \text{ at time of sale} = 120k - (6.7k \times 4) = 93.3k$

if sold for \$93.3k

Dr Cash 93.3k  
Dr Accum Depr 26.7k  
Cr Computer 120k

if sold for \$90k

Dr Cash 90k  
Dr Accum depr 26.7k  
Dr Loss on sale 3.3k  
Cr Computer 120k

if sold for \$95k

Dr Cash 95k  
Dr Accum Depr 26.7k  
Cr Computer 120k  
Cr Gain on sale 1.7k



$$7) \frac{\$200k}{10} = \$20k/\text{year amortization}$$

Dr Amortization Exp 20k  
Cr Patent 20k

$$8) \text{asset turnover} = \frac{\text{net sales}}{\text{avg assets}} = \frac{4.4M}{(5.8M + 5.2M)/2} = 0.8$$

9) Dr Cash 400k  
Cr Notes payable 400k at grant

Dr Int exp  $400k \times 0.12 \times \frac{1}{12} = 4K$  1 month of  
Cr Int payable 4K interest

Dr Notes payable 400k

Dr Int payable 4k

Dr Int exp  $400k \times 0.12 \times \frac{3}{12} = 12K$

Cr Cash 416k

at  
payback

10) Dr Cash 20k  
Cr Unearned rent revenue 20k

at the start  
of year

Dr Unearned rent revenue  $20k \times \frac{1}{12} = 1.7K$

Cr Rent revenue 1.7K

every month

11) First, Dr Warranty exp 2.1M  
Cr Provisions for warranties 2.1M

Later, Dr Provisions for warranties 15K  
Cr Cash 15K

$$12) PV = 100k(1.08)^{-5} + 8k \left( \frac{1 - (1.08)^{-5}}{0.08} \right) = 100k$$

at bond issuance Dr Cash 100k  
Cr Bonds payable 100k

interest payments Dr Int exp 8k  
Cr Int payable 8k

maturity date Dr Bonds payable 100k  
Cr Cash 100k

$$13) PV = 100k(1.12)^{-5} + 8k \left( \frac{1 - (1.12)^{-5}}{0.12} \right) = \$85,581$$

at bond issuance Dr Cash 85,581  
Dr Discounts on bonds payable 14,419  
Cr Bonds payable 100k

1st interest payment Dr Int exp  $85,581(0.12) = 10,270$   
Cr Discount on bonds payable 2,270  
Cr Int payable 8k (+XL)



2nd interest payment

Dr Int exp  $0.12(100k - 14,419 + 2270) = 10,542$   
Cr Discount on bonds payable 2,542  
Cr Int payable 8k

$$14) \quad PV = 100k(1.06)^{-5} + 8k\left(\frac{1 - (1.06)^{-5}}{0.06}\right) = \$108,425$$

at bond issuance      Dr Cash 108,425  
   Cr Bonds payable 100k  
   Cr Premium on bonds payable 8,425

interest payment      Dr Int exp  $0.06(100k + 8425) = 6,506$   
   Dr Premium on bonds payable 1,494  
   Cr Int payable 8k

next interest payment      Dr Int exp  $0.06(100k + 8425 - 1494) = 6416$   
   Dr Premium on bonds payable 1584  
   Cr Int payable 8k

15)      Dr Computers 50k      Dr Labour expense  $8k \times 6 = 48k$   
   Cr Common shares 50k      Cr Common shares 48k

$$16) \quad \text{avg issuance price} = \frac{500k}{50k} = \$10$$

Dr Common Shares  $(10 \times 15k) = 150k$   
Cr Cash 150k

$$17) \text{ avg issuance price} = \frac{500K}{50K} = \$10$$

Dr Common shares  $10 \times 15K = 150K$

Cr Cash  $15K \times 8 = 120K$

Cr Contributed surplus  $30K$

$$18) \text{ avg issuance price} = \frac{500K}{50K} = \$10$$

Dr Common shares  $10 \times 15K = 150K$

Dr Contributed surplus  $30K$

Cr Cash  $180K$

$$19) \text{ total amount of cash dividends payed at} \\ 3.22 \times 1.6M = 5.152M$$

Mar 1 Dr Dividends declared  $5.152M$

Cr Dividends payable  $5.152M$

Mar 24

Dr Dividends payable  $5.152M$

Cr Cash  $5.152M$

$$20) 0.12(2.4M) = 288K \text{ shares issued}$$

Mar 3 Dr Stock dividends declared  $288K \times 21 = 6,048,000$

Cr Common stock dividends distributable  $6,048,000$

Mar 29

Dr Common stock dividends distributable  $6,048,000$

Cr Common shares  $6,048,000$