P5–4A Pearl E. White Orthodontist specializes in correcting misaligned teeth. During 2012, Pearl provides services on account of $580,000. Of this amount, $70,000 remains receivable at the end of the year. An aging schedule as of December 31, 2012, is provided below.

Age Group	Amount Receivable	Estimated Percent Uncollectible	
Not yet due	$30,000	5%	= 1,500
0–90 days past due	15,000	10%	= 1500
91–180 days past due	10,000	30%	= 3000
More than 180 days past due	15,000	80%	= 12,000
Total	$70,000		18,000

Required:

1. Calculate the allowance for uncollectible accounts.
2. Record the December 31, 2012, adjustment, assuming the balance of Allowance for Uncollectible Accounts before adjustment is $4,000 (*credit*).
3. On July 19, 2013, a customer's account balance of $7,000 is written off as uncollectible. Record the write-off.
4. On September 30, 2013, the customer whose account was written off in *Requirement* 3 unexpectedly pays the full amount. Record the cash collection.

5. How would you answer to part 2 be different if the balance of the Allowance for Uncollectible Accounts before adjustment was $1,000 debit?

Allowance

	4,000
	14,000
	18,000

Bad Debt Exp 14,000
Allowance for Uncoll Acct 14,000

Write-off A/R
Allowance for Uncoll Accts 7,000
A/R 7,000

Allowance

1,000	
	19,000
	18,000

Bad Debt Exp 19,000
Allowance 19,000

E6–3 During 2012, Trombley Incorporated has the following inventory transactions.

Date	Transaction	Number of Units	Unit Cost	Total Cost
Jan. 1	Beginning inventory	10	$12	$120
Mar. 4	Purchase	15	11	165
Jun. 9	Purchase	20	10	200
Nov. 11	Purchase	20	8	160
		65		$645

Calculate i
amounts w
declining (I

ASS
20% tax rate
calculate tax
savings.

$645 = COGS + EI

For the entire year, the company sells 50 units of inventory for $20 each.

Required:

1. Using FIFO, calculate (a) ending inventory, (b) cost of goods sold, (c) sales revenue, and (d) gross profit.
2. Using LIFO, calculate (a) ending inventory, (b) cost of goods sold, (c) sales revenue, and (d) gross profit.
3. Using weighted-average cost, calculate (a) ending inventory, (b) cost of goods sold, (c) sales revenue, and (d) gross profit.
4. Determine which method will result in higher profitability when inventory costs are declining.

5. Assume a 20% tax rate, calculate the tax savings the company will receive by using LIFO rather than FIFO.

$645/65 = 9.92

END INV = 15 units

FIFO

15 @ 8 = 120

LIFO

10 @ 12 = 120
5 @ 11 = 55
175

wht. avg

15 @ 9.92 = 148.80

COGS

FIFO

~~10 @ 12 = 120~~
~~15 @ 11 = 165~~
~~5 @ 8 = 40~~
10 @ 12 = 120
15 @ 11 = 165
20 @ 10 = 200
5 @ 8 = 40
525

LIFO

20 @ 8 = 160
20 @ 10 = 200
10 @ 11 = 110
470

55
*20%
11

W$ AVG

50 @ 9.92 = 496

E6–14 A company like **Golf USA** that sells golf-related inventory typically will have inventory items such as golf clothing and golf equipment. As technology advances the design and performance of the next generation of drivers, the older models become less marketable and therefore decline in value. Suppose that in 2012, **Ping** (a manufacturer of golf clubs) introduces the MegaDriver II, the new and improved version of the MegaDriver. Below are amounts related to Golf USA's inventory at the end of 2012.

Inventory	Quantity	Cost	Market	TOTAL INV @ COST	TOTAL INV @ LCM
Shirts	25	$ 50	$ 60	1,250	1,250
MegaDriver	5	260	200	1,300	1,000
MegaDriver II	20	300	320	6,000	6,000
				8,550	8,250

↳ # 300

Required:

1. Calculate ending inventory under lower-of-cost-or-market.
2. Record any necessary adjustment to inventory.
3. Explain the impact of the adjustment in the financial statements.

Cost of Goods Sold 300

Inventory 300

A - 300

L NE

SE - 300

R NE

E + 300

NI - 300

P7–5A University Car Wash built a deluxe car wash across the street from campus.
4) The new machines cost $240,000 including installation. The company estimates that the equipment will have a residual value of $30,000. University Car Wash also estimates it will use the machine for six years or about 12,000 total hours.

Required:

Prepare a depreciation schedule for six years using the following methods:

1. Straight-line.
2. Double-declining-balance.
3. Activity-based.

Actual use per year was as follows:

$\frac{240{,}000 - 30{,}000}{12{,}000} = 17.5\ /hr$

Year	Hours Used
1	2,600
2	2,100
3	2,200
4	1,800
5	1,600
6	1,700

2,600 * 17.5 = 45,500
2,100 * 17.5 = 36,750
2,200 * 17.5 = 38,500
1,800 * 17.5 = 31,500
1,600 * 17.5 = 28,000
1,700 * 17.5 = 29,750

$\frac{240{,}000 - 30{,}000}{6\ yrs} = 35{,}000\ /yr$

	Cost	Exp	A/D	BV
Yr 1	240,000	35,000	35,000	205,000
2			70,000	170,000
3			105,000	135,000
4			140,000	100,000
5			175,000	65,000
6			210,000	30,000

$\frac{1}{6} * 2 = \frac{2}{6}$

DDB

Yr	Cost	Exp	A/D	BV
1	240,000	80,000	80,000	160,000
2		53,333	133,333	106,667
3		35,556	168,889	71,111
4		23,704	192,593	47,407
5		15,802	208,395	31,605
6		1605	210,000	30,000
7				

E7–11 Speedy Delivery Company purchases a delivery van for $28,000. Speedy estimates that at the end of its four-year service life, the van will be worth $4,000. During the four-year period, the company expects to drive the van 120,000 miles.

Required:

Calculate annual depreciation for the four-year life of the van using each of the following methods. Round all amounts to the nearest dollar.

1. Straight-line.
2. Double-declining-balance.
3. Activity-based.

Actual miles driven each year were 33,000 miles in year 1; 36,000 miles in year 2; 28,000 miles in year 3; and 30,000 miles in year 4. Note that actual total miles of 127,000 exceed expectations by 7,000 miles.

#1 STRAIGHT-line

$\frac{28,000 - 4000}{4 \text{ YRS}} = 6,000$

Year	Cost	Depr. Exp	Accum Dep	Book Value
1	28,000	6,000	6,000	22,000
2	28,000	6,000	12,000	16,000
3	28,000	6,000	18,000	10,000
4	28,000	6,000	24,000	4,000

#2 DDB

$\frac{1}{4} * 2 = \frac{2}{4}$ = Depr RATE

YEAR	COST	Depr. Exp	Accum Dep	Book Value
1	28,000	14,000	14,000	14,000
2	28,000	7,000	21,000	7,000
3	28,000	(*) 3,000	24,000	4,000

#3 - Units of Production

Depr RATE $= \frac{28,000 - 4000}{120,000} = \$0.20/\text{mi}$

YEAR	COST	units of production	Depr. Exp	Accum Dep.	Book Value
1	28,000	33,000	6,600	6,600	21,400
2	28,000	36,000	7,200	13,800	14,200
3	28,000	28,000	5,600	19,400	8,600
4	28,000	30,000	(*) 4,600	24,000	4,000

(*) you cannot depreciate the asset below residual value.

E7-14 The Donut Stop acquired equipment for $25,000. The company uses straight-line depreciation and estimates a residual value of $5,000 and a four-year service life. At the end of the second year, the company estimates that the equipment will be useful for four additional years, for a total service life of six years rather than the original four. At the same time, the company also changed the estimated residual value to $3,000 from the original estimate of $5,000.

Required:

Calculate how much The Donut Stop should record each year for depreciation in years 3 to 6.

$$\frac{25{,}000 - 5{,}000}{4\text{ yrs}} = \$5{,}000/\text{yr}$$

$$\begin{array}{r} \$5{,}000/\text{yr} \\ \times\ 2 \\ \hline 10{,}000 \end{array}$$

DV @ End of Yr 2

Cost	25,000
− A/D	(10,000)
B.V.	15,000 ←

$$\frac{15{,}000 - 3{,}000}{4\text{ yrs}} = \$3{,}000/\text{yr}$$

E7–17 Abbott Landscaping purchased a tractor at a cost of $32,000 and sold it three years later for $16,000. Abbott recorded depreciation using the straight-line method, a five-year service life, and a $2,000 residual value. Tractors are included in the Equipment account.

Required:

1. Record the sale.
2. Assume the tractor was sold for $10,000 instead of $16,000. Record the sale.

$\frac{32,000 - 2,000}{5} = 6,000/yr$

Cost	32,000	
A/D	18,000	16,000
B.V.	14,000	14,000
	(10,000)	
	4,000 loss	2,000 gain

Dep Exp	6,000	
A/D		6,000

Cash	10,000	
A/D	18,000	
Loss on Sale	4,000	
Equip		32,000

Cash	16,000	
A/D	18,000	
Equip		32,000
Gain on Sale		2,000

E7–20 Midwest Services, Inc., operates several restaurant chains throughout the Midwest. One restaurant chain has experienced sharply declining profits. The company's management has decided to test the operational assets of the restaurants for possible impairment. The relevant information for these assets is presented below.

Book value	$8.5 million
Estimated total future cash flows	7.5 million
Fair value	6.0 million

Required:

1. Determine the amount of the impairment loss, if any.
2. Repeat *Requirement* 1 assuming that the estimated total future cash flows are $9.5 million and the fair value is $8 million.

#1 STEP 1 = Is there IMPAIRMENT ?

BV to Future Cash Flow

if BV > Future Cash Flow => IMPAIRMENT

STEP 2: Calculate Loss on Impairment

BV − FMV

8.5M − 6.0M = Loss of 2.5 million

only have a loss if BV > FMV

Loss on Impairment	2,500,000	
Asset		2,500,000

#2 NO IMPAIRMENT, Thus NO LOSS to be calculated.

BV = 8.5 M

Future Cash Flow = 9.5 M