

**2023 Level I
Review Question/Answers**

1. A property's tax bill is \$15,000 and the property's market value is \$3,000,000. What is the effective tax rate?

- | | |
|-----------------------|---------------|
| A) 60% | C) 1% |
| <u>B) .50%</u> | D) 10% |

2. Business lot has a NOI monthly income of \$1,000. The rate of return is 10%. What is the value of the property?

- | | |
|--------------------|----------------------------|
| A) \$10,000 | C) \$130,000 |
| B) \$12,000 | <u>D) \$120,000</u> |

3. NE 1/4, SE 1/4, NE 1/4 of section 5 has how many square feet?

- | | |
|--------------------------|---------------------|
| A) 217,800 | C) 4,356,000 |
| <u>B) 435,600</u> | D) 43,560 |

For question # 4 the following data is available, to develop an adjustment for time in the sales comparison approach.

Sale #1 sold 1 yr. ago for \$50,000 and 8 months ago for \$53,600

Sale #2 sold 1 yr. ago for \$48,000 and 5 months ago for \$54,048

Sale #3 sold 1 yr. ago for \$52,000 and 9 months ago for \$54,808

4. What is the time adjustment per month?

- | | |
|---------------|------------------------|
| A) .9% | <u>C) 1.80%</u> |
| B) 18% | D) .5% |

5. Basement recreation room has 1,800 sq. ft. It has floor, ceiling, and wall finish. What is the cost to add for this room?

- | | |
|---------------------------|--------------------|
| A) \$4,700 | C) \$7,600 |
| <u>B) \$12,900</u> | D) \$10,400 |

Questions 6, 7, and 8 are based on the following information:

A building has 40,000 sq. ft of gross building, of which only 39,000 sq. ft. is the net leasable area. Mkt. rent is \$20 per sq. ft. for net leasable area. Vacancy and collection loss is 4% of the PGI. Miscellaneous income is \$4,000.00. Operating expenses are 35% of the EGI. Debt service is projected to be 75% of the NOI.

6. What is the Potential Gross Income of this property?

- | | |
|---------------------|--------------|
| A) \$800,000 | C) \$680,000 |
| <u>B) \$780,000</u> | D) \$750,000 |

7. What is the Effective Gross Income of this property?

- | | |
|---------------------|--------------|
| A) \$768,000 | C) \$802,000 |
| <u>B) \$752,800</u> | D) \$643,000 |

8. What is the Net Operating Income of this property?

- | | |
|---------------------|--------------|
| A) \$767,999 | C) \$643,000 |
| <u>B) \$489,320</u> | D) \$780,000 |

9. A property contains 15,000 sq. ft. Market rent is \$16.00 per sq. ft. The vacancy rate for this type business is 5%, and the collection loss rate is 1%. The property has miscellaneous income of \$500.00 per month. Net leasable area is 14,000 sq. ft. What is the EGI for this property?

- | | |
|---------------------|----------------------|
| A) \$224,000 | C) \$222,550 |
| <u>B) \$216,560</u> | D) None of the above |

10. A residential parcel has 10 acres. There is a dwelling on the property. 7 acres are being farmed. The farm land base rate is \$1,500 and the productivity factor is 1.10. Excess residential acreage is valued at \$1,250 per acre. Homesites are valued at \$6,000.00. What is the estimated value of this parcel rounded to the nearest \$100.00?

- | | |
|--------------------|------------|
| <u>A) \$20,100</u> | C) \$2,400 |
| B) \$9,600 | D) \$6,000 |

11. A two story frame house has 1,500 sq. ft. on each floor. The first floor has 2 increments of brick. The second floor has 1 increment of brick. What value would you have for the second floor?

- | | |
|--------------------|----------------------|
| A) \$94,700 | C) \$36,600 |
| <u>B) \$53,800</u> | D) None of the above |

12. If the Quality Grade for a dwelling is a C+1, what is the appropriate Quality Grade Factor?

- | | |
|----------------|---------|
| A) 110% | C) 120% |
| <u>B) 105%</u> | D) 95% |

13. The house in question 11 has an open framed porch of 550 sq. ft. What value would you put down for the porch?

- A) \$10,900
- B) \$10,100

- C) \$11,800
- D) \$17,200

14. Apartment houses in the area have a GIM of 7.0. The EGI of the subject house is \$70,000 and the NOI is \$48,000. What is the estimated value of the subject property?

- A) \$490,000
- B) \$390,000

- C) \$336,000
- D) \$200,100

15. A house has an attic of 1,400 sq. ft. Of which 900 is finished. What value would you put on the property record card for the attic ?

- A) \$17,600
- B) \$14,900

- C) \$8,400
- D) \$7,400

16. Using the following information determine a value for a subject property.

Subject: Frame Construction, 4 rooms on 1st floor, hot water hear, 4 rooms on the 2nd floor, 2 bathrooms on the 2nd floor, a 2 car garage, and not located on the water.

Sale # 1: Brick construction 4 rooms on the 1st floor, 4 rooms on the 2nd floor, hot water heat, 1 second floor bathroom, 3 car garage, and located on the water. Sold for #150,000 3 days ago.

Sale # 2: Frame Construction, 4 rooms on 1st floor, hot water heat, 4 rooms on the 2nd floor, 2 car garage, 2 bathrooms on the 2nd floor, and not located on the water. Sold for \$130,000 1 year ago

Sale # 3: Brick Construction, 4 rooms on the 1st floor, forced heat and air, 3 rooms on the 2nd floor, 1 second floor bathroom, 2 car garage, and not located on the water. Sold for \$100,000 2 years ago.

Properties have increased in value 6% per year.

Brick is worth \$15,000 more than frame.

First floor rooms are worth \$10,000

Hot water heat is worth \$2000 more than forced air.

Second floor rooms are worth \$8,000

Bathrooms have a value of \$5,000

Garage bays are worth \$4,000

Waterfront is worth \$10,000 more than non waterfront.

	Sale 1	Sale 2	Sale 3	Subject
Sale Price	\$150,000	\$130,000	\$100,000	
Date of Sale	Current	1 year ago	2 years ago	
Time Adjustment	0	6% or \$7,800	12% or \$12,000	
Time Adjusted Sale Price	\$150,000	\$137,800	\$112,000	
Amenities				
Construction	Brick (\$15,000)	Frame	Brick (\$15,000)	Frame
1st Floor rooms	4	4	4	4
Heat	Hot water	Hot water	Forced air +\$2,000	Hot water
2nd floor rooms	4	4	3 +\$8,000	4
2nd floor bathrooms	1 +\$5,000	2	1 +\$5,000	2
Garage	3 car (\$4,000)	2 car	2 car	2 car
Location	Waterfront (\$10,000)	Not waterfront	Not waterfront	Not waterfront
Net Adjustment	(\$24,000)	0	0	
Adjusted sale price	\$126,000	\$137,800	\$112,000	\$137,800

16. What is the value determined for the subject property?

A) \$137,800
B) 112,000

C) 126,000
D) 125,266

17. To find the PRD, you divide the _____ by the Weighted Mean.

- A) Mean
- B) Median

- C) Average Absolute Deviation
- D) Confidence Intervals

18. For uniformity purposes, the PRD must be between _____ and 1.03.

- A) .97
- B) .90

- C) .05
- D) .98

19. Subtracting Operating Expenses and Reserve for Replacements from the EGI equals the _____.

- A) PGI
- B) NOI

- C) Vacancy and Collection Loss
- D) Miscellaneous Income

20. The availability of commodities and/or services for purchase that sellers offer at a certain price is known as?

- A) Market Value
- B) Equilibrium

- C) Supply
- D) Demand

21. In the sales comparison approach, attribute adjustments such as building size, # of bathrooms, year built are examples of _____ ?

- A) qualitative adjustments
- B) paired sales

- C) quantitative adjustments
- D) a buyers market

22. A corner doughnut shop has monthly NOI of \$1,250. The owner's overall cap rate for the property is 11%. What is the value of this property ?

- | | |
|--------------|---------------------|
| A) \$138,180 | C) \$1,650 |
| B) \$11,360 | <u>D) \$136,360</u> |

23. If an 18-unit apartment building has 4 vacant units, what is the occupancy rate?

- | | |
|---------------|--------|
| <u>A) 78%</u> | C) 19% |
| B) 22% | D) 25% |

24. The sale price of a property divided by the annual effective gross income it generates is the _____.

- | | |
|-----------------------------------|--------------------------|
| <u>A) gross income multiplier</u> | C) gross rent multiplier |
| B) neighborhood factor | D) indicated value |

25. The _____ rate reflects the return on the investment.

- | | |
|-------------------|--------------------|
| A) recapture | C) effective tax |
| B) capitalization | <u>D) discount</u> |

26. What value would you put down for a 20' by 30' brick attached garage?

- | | |
|--------------------|-------------|
| A) \$9,200 | C) \$16,700 |
| <u>B) \$19,400</u> | D) \$25,600 |

27. As taught in this Level I prep class, the first adjustment in the Sales Comparison Approach is for _____.

- | | |
|----------------|----------------|
| A) bedrooms | C) garages |
| B) sale prices | <u>D) time</u> |

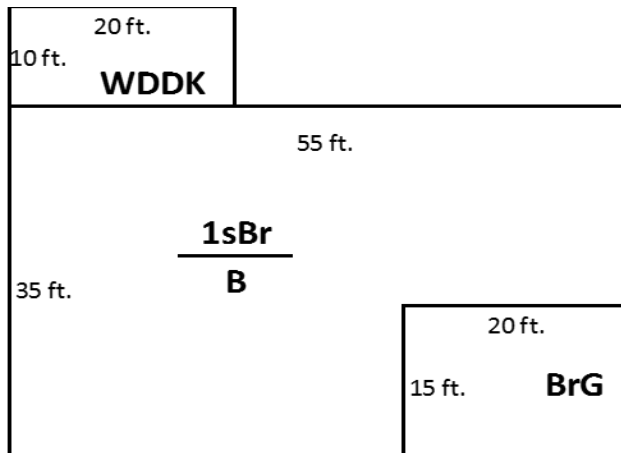
28. I am pricing a two-story dwelling that has air conditioning throughout. The dwelling has 1,900 square feet on the first floor and 1,300 square feet on the second floor. What is the air conditioning adjustment amount ?

- | | |
|-------------------|------------|
| <u>A) \$6,300</u> | C) \$6,900 |
| B) \$9,300 | D) \$8,200 |

29. If my subject property has 5 bedrooms and my comparable has 4 bedrooms, when making the adjustment to the comparable, this adjustment would be made _____.

- | | |
|------------------|---------------------------------|
| A) downward | C) no adjustment required |
| <u>B) upward</u> | D) as a paired sales adjustment |

For problems 30 - 32, use the following information and sketch.



This one story brick house was built in 2001 in Parke County. It was built over an unfinished basement and has central air conditioning throughout. It also contains an attached brick garage and a wood deck. The quality grade for this dwelling is a C+1 and its condition rating is good.

30. What is the square footage for the first floor of the dwelling?

- | | |
|----------|-----------------|
| A) 400 | C) <u>1,625</u> |
| B) 1,925 | D) 1,225 |

31. What is the Replacement Cost (RCN) of the dwelling?

- | | |
|---------------------|--------------|
| A) <u>\$163,770</u> | C) \$164,120 |
| B) \$160,000 | D) \$156,300 |

32. What is the Improvement Value of the dwelling?

- | | |
|--------------|---------------------|
| A) \$152,600 | C) \$250,000 |
| B) \$195,000 | D) <u>\$132,700</u> |

2023 Level 1 Review Test Calculation/Answers

1. A property's tax bill is \$15,000 and the property's market value is \$3,000,000. What is the effective tax rate?

You divide the taxes paid by the market value of the property.

Taxes	\$15,000	Divided by	MV	\$3,000,000	<u>Answer</u>	<u>0.50%</u>
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2. A Business has a NOI monthly income of \$1,000. The rate of return is 10%. What is the value of the property?

This is a direct capitalization problem in which you need to use IRV. You need the annual income for this!!

You know the NOI and the Cap Rate. You are looking for value.

In IRV $V=I/R$ so

To get Income you multiply the per month of \$1,000 times 12 to get the yearly NOI.

$$V = \$12,000 \text{ divided by } 10.00\% = \underline{\underline{\$120,000}} \quad \text{Answer} \quad \underline{\underline{\$120,000}}$$

3. NE $\frac{1}{4}$, SE $\frac{1}{4}$, NE $\frac{1}{4}$ of section 5 has how many square feet?

640 total acres in a section

160--40--10	10	43560	435600	Answer	<u>\$435,600</u>
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4. Sale #1 sold 1 yr. ago for \$50,000 and 8 months ago for \$53,600

Sale #2 sold 1 yr. ago for \$48,000 and 5 months ago for \$54,048

Sale #3 sold 1 yr. ago for \$52,000 and 9 months ago for \$54,808

What is the time adjustment per month?

	1st Sale	2nd Sale	Difference	Divide by 1st Sal	% Change	# months	% per Month	
Sale # 1	\$50,000	\$53,600	\$3,600	\$3,600/\$50,000	7.20%	4	1.80%	
Sale # 2	\$48,000	\$54,048	\$6,048	\$6,048/\$48,000	12.60%	7	1.80%	
Sale # 3	\$52,000	\$54,808	\$2,808	\$2,808/\$52,000	5.40%	3	1.80%	
							Answer	1.80%

5. Basement recreation room has 1,800 sq. ft. It has floor, ceiling and interior wall finish. What is the cost to add for this room?

First go to Book 1 to Chapter 3, and determine the Rec room type, either 1, 2, 3, or 4.

Ours has Floor, Ceiling, and Wall Finish which per the above is a Rec Room Type 2

Now go to Book 1 to Appendix C, Schedule C and look at the right hand side of the chart.

Then under Rec Room Type 2 for 1,800 Square Feet you should see \$12,900

Answer **\$12,900**

6., 7., & 8. Bldg. has 40,000 sq. ft of gross bldg. area and 39,000 sq. ft. of net leasable area. Mkt. rent is \$20 per sq. ft. for net leasable area. Vac. and coll. loss is 4% of PGI. Misc. income is \$4,000. Operating expenses are 35% of EGI, and debt service is projected to be 75% of NOI.

PGI	\$39,000	times	\$20	\$780,000	PGI	<u>Answer # 6</u>	<u>\$780,000</u>
V & C Loss	4%	times	\$780,000	(\$31,200)	V & C		
Misc. Income				\$4,000	Misc. In		
EGI				\$752,800	EGI	<u>Answer # 7</u>	<u>\$752,800</u>
Exp	35%	times	\$752,800	(\$263,480)	Exp		
NOI				\$489,320	NOI	<u>Answer # 8</u>	<u>\$489,320</u>

9. A property contains 15,000 sq. ft. Market rent is \$16.00 per sq. ft. The vacancy rate for this type business is 5%, and the collection loss rate is 1%. The property has misc. income of \$500/month. Net leasable area is 14,000 sq. ft. What is the EGI for this property?

PGI	14,000	16	\$224,000			
V & C	0.06		(\$13,440)			
Misc. Inc	\$500/mo.		\$6,000			
EGI			\$216,560	<u>Answer</u>		<u>\$216,560</u>

10. A residential parcel has 10 acres. There is a dwelling on the property. 7 acres are being farmed. The farm land base rate is \$1,500 and the productivity factor is 1.10. Excess residential acreage is valued at \$1,250 per acre. Homesites are valued at \$6,000. What is the estimated value of this parcel rounded to the nearest \$100?

One acre homesite	1	\$6,000			
Excess acres	2	\$2,500			
Farm land	7	\$11,550			
Total acres	10	\$20,050	<u>Answer</u>		<u>\$20,100</u> Rounded

Excess acres	\$1,250	\$1,250	2	\$2,500
Farm land price	\$1,500	1.1	\$1,650	7 \$11,550

11. A two story frame house has 1,500 sq. ft. on each floor. The first floor has 2 increments of brick. The second floor has 1 increment of brick. What value would you have for the second floor?

Go to Schedule A of Appendix C in Book 1				
1,500 sq ft for second floor		\$52,200		
add for 1 increment of brick on 2nd floor		\$1,600		
Total second floor		\$53,800	<u>Answer</u>	<u>\$53,800</u>

12. If the Quality Grade for a dwelling is a C+1, what is the appropriate Quality Grade Factor?

A) 110%

B) 105%

C) 120%

D) 95%

Appendix C, Schedule F.

13. The house in question 11 has an open framed porch of 550 sq. ft. What value would you put down for the porch?

Go to Schedule E.2, of Appendix C.

First 400 sq ft of OFP

\$12,800

We have 550 so -400 leaves 150 rounded is two (2) 100 ft increments

2 times \$2,200 for each increment equals

\$4,400

\$17,200

Answer

\$17,200

14. Apartment houses in the area have a GIM of 7.0. The EGI of the subject house is \$70,000 and the NOI is \$48,000. What is the estimated value of the subject property?

Remember GIM is an annual factor based on Effective Gross Income

So we have Effective Gross Income of

\$70,000

GIM of

7

Estimated value is 7 times the Effective Gross Income or

\$490,000

Answer

\$490,000

15. A house has an attic of 1,400 sq. ft. Of which 900 is finished. What value would you put on the property record card for the attic?

Attics are in Appendix C, Book 1

Always start with the shell value and add how much extra the finish costs

Find the price for the total sq ft of attic as unfinished (1,400 Sq ft - Unfin Attic)

\$7,600

Add the finish to the unfinished (900 sq ft - Attic Fin)

\$10,000

Total attic price

\$17,600

Answer

\$17,600

16. Determine a value for a subject property given the following information:

Subject: Frame Construction--4 rooms on 1st floor
Hot water heat--4 rooms on 2nd floor--2 car garage
2 bathrooms on 2nd floor-- Not located on water.

Sale # 1: Sold for \$150,000--3 days ago--Brick--
4 1st floor rooms and 4 2nd floor rooms--
Hot water heat--1 second floor bathroom--
3 car garage--Located on the water

Sale # 2: Frame Construction--4 rooms on 1st floor
Hot water heat--4 rooms on 2nd floor--2 car garage
2 bathrooms on 2nd floor-- Not located on water.
Sold for \$130,000 1 year ago

Sale # 3: Sold 2 years ago for \$100,000--
Brick Construction--4 rooms on 1st floor
Forced Air heat--3 rooms on 2nd floor
1 2nd floor bathroom-- 2 car garage--
not located on the water

Properties have increased in value 6% per year.

Brick is worth \$15,000 more than frame.

First floor rooms are worth \$10,000

Hot water heat is worth \$2000 more than forced air.

Second floor rooms are worth \$8,000

Bathrooms have a value of \$5,000

Garage bays are worth \$4,000

Waterfront is worth \$10,000 more than non waterfront.

	Sale 1	Sale 2	Sale 3	Subject
Sale Price	\$150,000	\$130,000	\$100,000	
Date of Sale	Current	1 year ago	2 years ago	
<i>Time Adjustment</i>	0	6% or \$7,800	12% or \$12,000	
<i>Time Adjusted Sale Price</i>	\$150,000	\$137,800	\$112,000	
Amenities				
Construction	Brick (\$15,000)	Frame	Brick (\$15,000)	Frame
1st Floor rooms	4	4	4	4
Heat	Hot water	Hot water	Forced air +\$2,000	Hot water
2nd floor rooms	4	4	3 +\$8,000	4
2nd floor bathrooms	1 +\$5,000	2	1 +\$5,000	2
Garage	3 car (\$4,000)	2 car	2 car	2 car
Location	Waterfront (\$10,000)	Not waterfront	Not waterfront	Not waterfront
Net Adjustment	(\$24,000)	0	0	
Adjusted sale price	\$126,000	\$137,800	\$112,000	\$137,800

17. To find the PRD, you divide the _____ by the Weighted Mean.

- A) Mean
- B) Median

- C) Average Absolute Deviation
- D) Confidence Intervals

18. For uniformity purposes, the PRD must be between _____ and 1.03.

- A) .97
- B) .90

- C) .05
- D) .98

19. Subtracting Operating Expenses and Reserve for Replacements from the EGI equals the _____.

- A) PGI
- B) NOI

- C) Vacancy and Collection Loss
- D) Miscellaneous Income

20. The availability of commodities and/or services for purchase that sellers offer at a certain price is known as?

- A) Market Value
- B) Equilibrium

- C) Supply
- D) Demand

21. In the sales comparison approach, attribute adjustments such as building size, # of bathrooms, year built are examples of _____.

- a. qualitative adjustments
- b. paired sales

- c. quantitative adjustments
- d. a buyers market

22. A corner doughnut shop has monthly income earned of \$1,250. The owner's required rate of return for this type of property is 11% per year. What is the value of this property?

- a. \$138,180
- b. \$11,360

- c. \$1,650
- d. \$136,360

12 months X \$1,250 = 15000
Rate = 11% \$15,000/11%
Round \$136,360

23. If an 18-unit apartment building has 4 vacant units, what is the occupancy rate?

- a. 78%
- b. 22%

- c. 19%
- d. 25%

18 units available
4 vacant
Leaves 14 occup 14/18 = 78%

24. The sale price of a property divided by the annual effective gross income it generates is the _____.

- a. gross income multiplier
- b. neighborhood factor

- c. gross rent multiplier
- d. indicated value

25. The ____ rate reflects the return on the investment.

- a. recapture
- b. capitalization

- c. effective tax
- d. discount

26. What value would you put down for a 20' by 30' brick attached garage?

- A) \$9,200
- B) \$19,400

- C) \$16,700
- D) \$25,600

20' X 30' = 600 sq. ft.
App. C, Page7 \$19,400

27. As taught in this Level I prep class, the first adjustment in the Sales Comparison Approach is for _____.

- a. bedrooms
- b. sale prices

- c. garages
- d. time

28. I am pricing a two-story dwelling that has air conditioning throughout. The dwelling has 1,900 square feet on the first floor and 1,300 square feet on the second floor. What is the air conditioning adjustment amount?

- a. 6,300
- b. 9,300

- c. 6,900
- d. 8,200

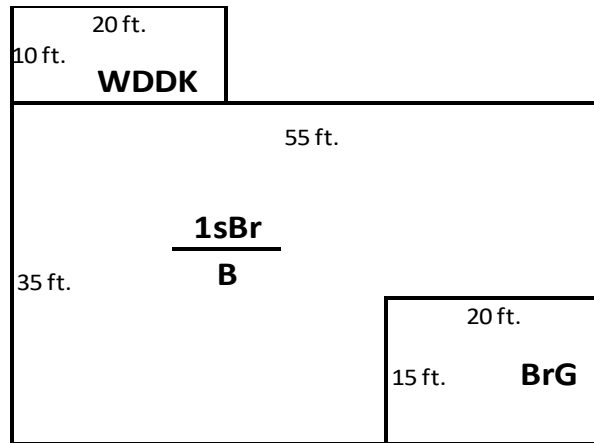
First Floor	\$4,300
Second Floor	\$2,000
	<u>\$6,300</u>

29. If my subject property has 5 bedrooms and my comparable has 4 bedrooms, when making the adjustment to the comparable this adjustment would be made

- a. downward
- b. upward

- c. no adjustment required
- d. as a paired sales adjustment

For problems 30 - 32, use the following information and sketch.



This one story brick house was built in 2001 in Parke County. It was built over an unfinished basement and has central air conditioning throughout. It also contains an attached brick garage and a wood deck. The quality grade for this dwelling is a C+1 and its condition rating is good.

30. What is the square footage for the first floor of the dwelling?

- A) 400
- B) 1,925

- C) 1,625
- D) 1,225

Cut dwelling into two pieces
 $35 \times 35 = 1,225 \text{ sq. ft.}$
 $20 \times 20 = 400 \text{ sq. ft.}$
1,625 sq. ft.

31. What is the Replacement Cost (RCN) of the dwelling?

A) \$163,770

B) \$160,000

C) \$164,120

D) \$156,300

Base Price 1st story: \$118,500

Base Price Basement: \$35,900

Subtotal: \$154,400

Add for A/C: \$3,800

Add for Att. Br Garage (300 sq ft): \$11,600

Add Exterior Features (WDDK 200 sq ft): \$3,500

Subtotal: \$173,300

Multiply by Quality Grade Factor 105%

Subtotal: \$181,970

Multiply by LCM: 90%

RCN: \$163,770

RCN = \$163,770

32. What is the Improvement Value of the dwelling?

A) \$152,600

B) \$195,000

C) \$250,000

D) \$132,700

RCN: **\$163,770**

Find depreciation in Appendix B

Quality C+1, Good Condition, 22 years old

Depreciation %: **19%**

Use either method mentioned in tutorials on how to calculate the Remainder Value

Method 1

RCN:	\$163,770
Multiply by Dep. %:	19%
Dep. \$:	\$31,116

RCN:	\$163,770
Subtract Dep. \$:	\$31,116
Remainder Value	\$132,654

Method 2

RCN %:	100%
Subtract Dep. %	19%
Value Left:	81%

RCN:	\$163,770
Multiply by Val	81%
Remainder Valu	\$132,650

Since there is no neighborhood factor, percent complete factor, or obsolescence; the Remainder Value is rounded to the nearest \$100 to serve as the Improvement Value.

Improvement Value = \$132,700

