

SECTION III.

MATH WORKBOOK

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MATH

(Approximately 4-8 math problems on the Salesperson Exam)

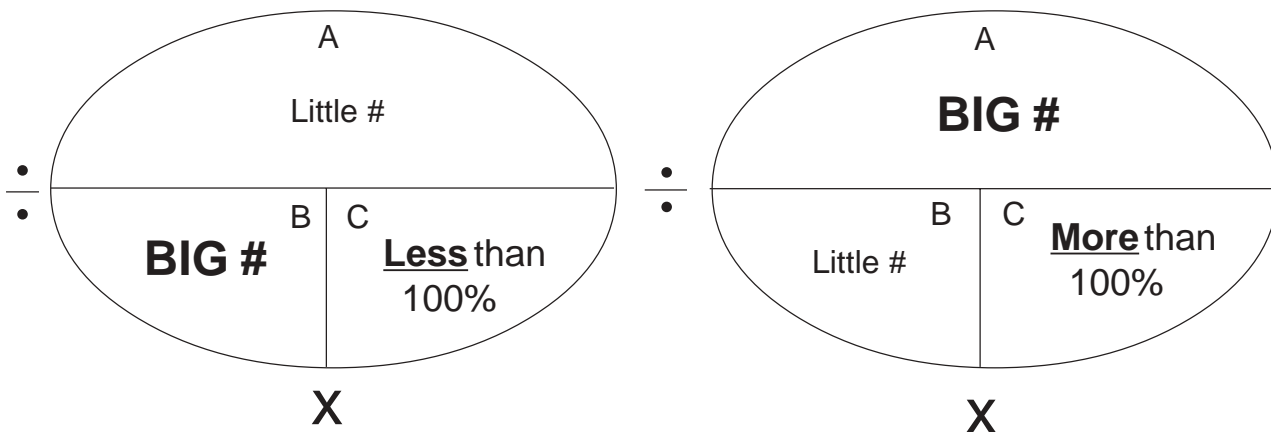
I. CALCULATORS

- A. No "musical" calculators unless you can stop the music.
- B. No printing calculators.
- C. Programmable calculators are allowed.
- D. No alphanumeric calculators.
- E. Use a simple, hand-held calculator with big buttons and big numbers.

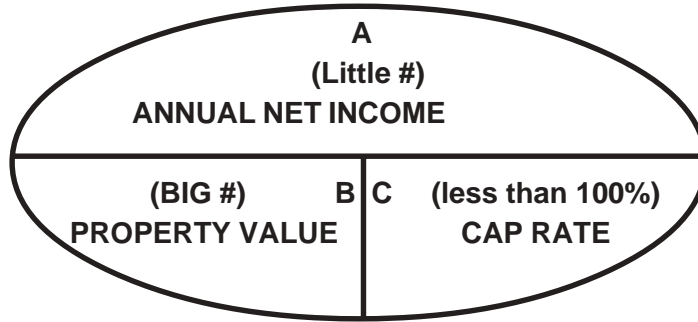
II. CIRCLE DIAGRAM

Rules

1. Percentage always goes in box "C."
2. Little number in "A," big number in "B," where "C" is less than 100%.
3. Little number in "B," big number in "A," where "C" is more than 100%.
4. The "A" number always gets divided by the other number (Only divide "A").
5. Always annualize the figures.

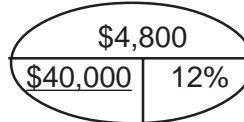


**CAPITALIZATION
APPRAISAL
PROBLEMS**



1. The net income of an apartment building went down \$400 per month when a freeway was built nearby. If investors demand a 12% capitalization rate for this area, how much has the building lost in value?

- A. \$3,333
- B. \$20,000
- C. \$36,000
- D. \$40,000



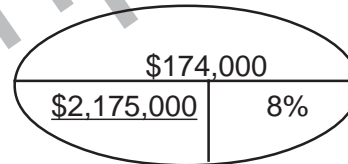
ANS. 1 D

(1) $\$400 \times 12 = \$4,800$.

(2) $\$4,800$ divided by 12% = $\$40,000$.

2. Leonard, an intelligent real estate investor wants to purchase a 40-unit apartment building that has an annual net income of \$174,000. How much would he be willing to pay for the building, if he uses a 8% capitalization rate?

- A. \$1,400,000
- B. \$1,650,000
- C. \$1,985,000
- D. \$2,175,000

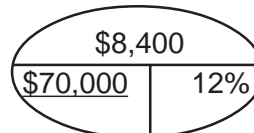


ANS. 2 D

(1) $\$174,000$ divided by 8% = $\$2,175,000$.

3. A small income property generates a monthly gross income of \$1,000. Over the last five years it has been vacant for three months. The annual expenses are \$3,000. If an appraiser applied a 12% capitalization rate to this property, what would be the value?

- A. \$58,000
- B. \$65,000
- C. \$70,000
- D. \$90,000



ANS. 3 C

(1) $\$1,000 \times 12 = \$12,000$ Annual gross income.

(2) 12 months x 5 years = 60 months.

(3) 3 months vacancies divided by 60 months = .05 = 5% vacancy factor.

(4) $\$12,000$ Annual gross income x 5% vacancy factor = $\$600$ annual vacancy loss.

(5) $\$12,000 - \$600 = \$11,400$ adjusted gross income.

(6) $\$11,400$ adjusted gross income - $\$3,000$ annual expenses = $\$8,400$ annual net income.

(7) $\$8,400$ divided by 12% = $\$70,000$.

Continued...