

Suggested Answers to Review and Discussion Questions: Lesson 6

1. The comparable in this example is similar to the subject property except that it has a single car garage and sold six months ago. Assuming that a garage is a positive feature in this market, this means that the comparable sale had a feature that was superior to the subject property; as a result, the comparable must have a negative adjustment made to reflect the lower price it would have sold for without this feature.

The appraiser will have to determine what a one car garage was worth at the time of sale, using market evidence. This can be done by finding two sales at the same date, one of which had a garage and another which did not. The difference in sale price should reflect the value of a single car garage. This value is then subtracted from the comparable's selling price. The comparable also sold 6 months ago and the market has increased by 5% since then. Therefore, this adjusted price must be increased by 5% to reflect what this comparable would have likely sold for in today's market. After the adjustments for time and the garage are made, the comparable should reflect the current market value of the subject property.

2.

| ITEM | SUBJECT | SALE 1 | SALE 2 | SALE 3 |
|--|-----------------|------------------------|------------------|----------------|
| Sale Price | ? | \$765,000 | \$780,000 | \$743,000 |
| (1) Real Property Rights Conveyed Adjustments | - | - | - | - |
| (2) Financing Adjustment | - | - | - | - |
| (3) Conditions of Sale (Motivation) | - | - | - | - |
| (4) Expenditures Made Immediately After Purchase | - | | | |
| (5) Market Conditions/Time | - | <u>\$0</u> | <u>+8%</u> | <u>+4%</u> |
| Adjusted Price | - | \$765,000 | \$842,400 | \$772,720 |
| (6) Other Adjustments | - | | | |
| Rooms | - | +8,000 | \$0.00 | +8,000 |
| Condition | - | +4,000 | (\$,000) | \$0 |
| Site | - | \$0 | \$0 | +3,000 |
| NET OTHER ADJUSTMENTS | - | <u>+12,000</u> | <u>(\$6,000)</u> | <u>+11,000</u> |
| Final Adjusted Sale/Listing Price | - | \$777,000 | \$836,400 | \$783,720 |
| For reconciliation purposes: | - | | | |
| Total gross (absolute) adjustment | - | \$12,000 | \$56,400 | \$40,720 |
| Total gross adjustment of % of sale price | - | 1.6% | 6.7% | 5.5% |
| RECONCILIATION: | Indicated Range | \$777,000 to \$836,400 | | |
| | Median | \$783,720 | | |
| | Mean | \$799,040 | | |

Weighting: All three comparables are within a close range and are all considered to be good indications of the market value of the subject property. However, Comparable #1 is the most recent and has the least gross (absolute) adjustments. Therefore, it is given the most weight in the analysis. Indicated value is set at \$777,000.

Note: In reconciling the comparables' adjusted prices, the median and mean provide information that may help in making your decision. However, it is NOT appropriate to choose the median or the mode as the final value estimate. The final value is based on your reasoned analysis. Remember valuation is part science, part art.

3.

| | 1 | 2 | 3 |
|---------------------------------------|------------|------------|-----------|
| Sale Price | \$339,500 | \$333,000 | \$335,000 |
| Market Conditions Adjustment | + \$18,000 | + \$18,000 | +\$1,500 |
| Adjusted Price | \$357,500 | \$351,000 | \$336,500 |
| OTHER ADJUSTMENTS | | | |
| Location | (\$5,000) | \$0 | \$0 |
| Modern Kitchen | \$0 | + 15,000 | \$0 |
| Old Furnace | (\$8,000) | (\$8,000) | \$0 |
| Recreation Room | \$0 | + 6,500 | \$0 |
| Condition | \$0 | (\$4,000) | \$0 |
| Attached Garage | \$0 | \$0 | + 8,000 |
| NET ADJUSTMENTS | \$5,000 | + 27,500 | + 9,500 |
| ADJUSTED PRICE | \$344,500 | \$360,500 | \$344,500 |
| GROSS ADJUSTMENTS | \$31,000 | \$51,500 | \$9,500 |
| Gross Adjustments(as % of sale price) | 9.13% | 15.5% | 2.84% |

RECONCILIATION:

| | |
|--------|------------------------|
| Median | \$344,500 |
| Mode | \$344,500 |
| Mean | \$349,833 |
| Range | \$344,500 to \$360,500 |

Weighting: Comparable 3 is the most recent sale and requires the least amount of adjustments. By giving the most weight to Comparable 3 and less weight to 1 and 2, the estimated market value of the subject property is \$344,500.

4. Elements of comparison are: market conditions, location, physical characteristics of the dwelling.

| | Subject | Index 1 | Index 2 | Index 3 |
|----------------------------------|---------|-----------|-----------|-----------|
| Sale Price | n/a | \$339,500 | \$333,000 | \$335,000 |
| Market Conditions | Current | - | - | 0 |
| Location | | + | 0 | 0 |
| Improvement Conditions | | + | - | - |
| Garage | | 0 | 0 | - |
| Overall comparability to subject | | 0 | - | - |

Comparable 1 is similar to the subject property because the increase in prices over the past year tends to offset the superior location and furnace of Comparable 1. Comparable 2 is inferior because, in addition to being a dated sale, its kitchen is dated and it does not have a recreation room. These deficiencies of Comparable 2 are more significant than condition and furnace. Comparable 3 is inferior because it does not have a garage.

The ranking table is:

| Index | Overall Compatibility | Sale Price |
|---------|-----------------------|------------|
| 1 | Similar | \$339,500 |
| Subject | Subject | |
| 3 | Inferior | \$335,000 |
| 2 | Inferior | \$333,000 |

The indication is that the market value of the subject property lies between \$335,000 and \$339,500, probably closer to \$339,500 because of the similarity of Comparable 1. This is supported by the quantitative information provided in Question 3 that shows a \$8,000 adjustment for a garage that Comparable 3 is lacking. Considering the foregoing, the qualitative analysis supports a subject property market value of +\$339,000.

5. (a) Calculate the monthly payments and the outstanding balance due at the end of the term.

Calculation

| Press | Display | Comments |
|------------------|----------------|--|
| 3.5 ■ NOM% | 3.5 | Entered stated nominal rate |
| 2 ■ P/YR | 2 | Entered stated compounded frequency |
| ■ EFF% | 3.530625 | Compute equivalent effective annual rate |
| 12 ■ P/YR | 12 | Enter desired compounding frequency |
| ■ NOM% | 3.474749 | Nominal contract rate with monthly compounding |
| 280000 PV | 280,000 | Actual loan amount |
| 300 N | 300 | Enter amortization period in months |
| 0 FV | 0 | FV not to be used |
| PMT | -1,397.956931 | Calculated payments |
| 1397.96 +/- PMT | -1,397.96 | Rounded payments |
| 60 INPUT ■ AMORT | PER 60-60 | |
| === | 241,583.748702 | Outstanding balance after 60 th payment |

- (b) Calculate financing adjustment (present value of payments and outstanding balance at market interest rate)

Calculation (continued)

| Press | Display | Comments |
|------------------|----------------|---|
| 4.5 ■ NOM% | 4.5 | Entered stated nominal rate |
| 2 ■ P/YR | 2 | Entered stated compounded frequency |
| ■ EFF% | 4.550625 | Compute equivalent effective annual rate |
| 12 ■ P/YR | 12 | Enter desired compounding frequency |
| ■ NOM% | 4.458383 | Equivalent j_{12} rate |
| 60 N | 60 | Enter contract term in months |
| 241583.75 +/- FV | -241,583.75 | OSB to be received at the end of the term |
| PV | 268,452.115216 | Market value of payment stream and OSB |

$$\text{Adjustment required} = \$280,000 - \$268,452.12 = \$11,547.88$$

- (c) The property described was sold subject to a vendor takeback mortgage, which was written at an interest rate below market rates. As this is a feature of the comparable that is superior to the subject property, a negative adjustment will have to be made for this mortgage. The sale price of this comparable would need to be adjusted downwards by \$11,547.88 to give a cash equivalent price of \$338,452.12. The actual adjustment required for this comparable to reflect the beneficial financing may vary from this amount, depending on the appraiser's opinion of how the beneficial financing was reflected in the sale price.

| | | | | | |
|----------------------------------|-------------------------|-------------------|---|-----------------------|------------------|
| 6. | (a) | Market Conditions | Sale 1: current | \$684,000 | |
| | | | Sale 2: 1 year old | <u>- 673,000</u> | |
| | | | Adjustment for market conditions | \$ 11,000 | |
| | | | $\$11,000 \div \$673,000 = 1.63\%$ per year | | |
| | | | Sale 4: $\$702,000 \times 1.63\% = \$11,442.60$ | | |
| | | | (rounded to \$11,400) | | |
| | | | Size | Sale 1: 2,000 sq. ft. | \$684,000 |
| | | | | Sale 3: 1,500 sq. ft. | <u>- 665,000</u> |
| | | | | Adjustment for size | \$ 19,000 |
| | | | Location | Sale 4: superior | \$702,000 |
| Adjustment for market conditions | <u>+ 11,400</u> | | | | |
| Sale 4 adjusted | \$713,400 | | | | |
| Sale 1: similar | <u>- 684,000</u> | | | | |
| Adjustment for location | \$ 29,400 | | | | |
| Basement | Sale 6: with basement | \$698,000 | | | |
| | Adjustment for size | + 19,000 | | | |
| | Adjustment for location | <u>- 29,400</u> | | | |
| | Sale 6 adjusted | \$687,600 | | | |
| | Sale 1: no basement | <u>- 684,000</u> | | | |
| | Adjustment for basement | \$ 3,600 | | | |
| Age | Sale 5: new | \$713,000 | | | |
| | Adjustment for basement | <u>- 3,600</u> | | | |
| | Sale 5 adjusted | \$709,400 | | | |
| | Sale 1: 5 years old | <u>- 684,000</u> | | | |
| | Adjustment for age | \$ 25,400 | | | |

(b)

| | Subject | Sale 1 | Sale 2 | Sale 3 | Sale 4 | Sale 5 | Sale 6 |
|------------------------------|---------|-----------|-----------|-----------|-----------|-----------|-----------|
| Price | ? | \$684,000 | \$673,000 | \$665,000 | \$702,000 | \$713,000 | \$698,000 |
| Market Conditions Adjustment | | | +\$11,000 | | +\$11,400 | | |
| Size Adjustment | | | | +\$19,000 | | | +\$19,000 |
| Location Adjustment | | | | | -\$29,400 | | -\$29,400 |
| Basement Adjustment | | +\$3,600 | +\$3,600 | +\$3,600 | +\$3,600 | | |
| Age Adjustment | | | | | | -\$25,400 | |
| Final Adjusted Price | | \$687,600 | \$687,600 | \$687,600 | \$687,600 | \$687,600 | \$687,600 |

(c) The value indication for the subject property is \$687,600. (Note: In practice, value indications generally fall within a range and based on the appraiser’s experience and knowledge of the marketplace, a final value is determined.)

7. Sale A: \$220.00 per sq. ft.

This building is two years older than the subject and has below average parking. However, it has a superior location. If each of these factors is given equal weight, this sale would be considered inferior to the subject and thus an upward adjustment from the sale price of \$220.00 per sq.ft. is expected. However, if the location was very important, and the parking and slightly older age were not as important, then we may see this comparable as superior, in which case a price lower than \$220.00 per sq. ft. is indicated.

Sale B: \$218.37 per sq. ft.

This building is one year older than the subject, has below average parking, and is in an inferior location. Overall, this property is considered inferior, and we would expect an upward adjustment from the sale price of \$218.37 per sq. ft.

Sale C: \$242.22 per sq. ft.

Sale C is the same age as the subject, but is slightly smaller in area (by 10%). It has superior parking and a superior location to the subject, suggesting that overall this sale is superior. A downward adjustment is expected from the sale price of \$242.22 per sq. ft.

Sale D: \$226.53 per sq. ft.

This building is one year older than the subject, but is very similar in size. It has similar parking, but boasts a superior location and above average construction and condition; the latter would probably negate any difference in age. Overall, this comparable is considered superior and a downward adjustment from \$226.53 per sq. ft. is warranted.

Sale E: \$214.90 per sq. ft.

Sale E is the same age as the subject and has similar average construction and condition. Its parking capacity is also average, and it is virtually the same size. However, its location is inferior to the subject, so overall it is considered inferior. This suggests that a price over \$214.90 per sq. ft. is appropriate for the subject.

The sales suggest a value higher than \$218.37 per sq. ft. as per Sale B and higher than \$214.90 per sq. ft. as per Sale E. Furthermore, Sales C and D indicate a value below \$242.22 per sq. ft. and \$226.53 per sq. ft. Sale A supports either a value above or below \$220.00 per sq. ft. depending on the importance of location as discussed. Overall, the value is indicated between that of Sales B and E, and that of Sales C and D; thus, a value around \$220.00 per sq. ft., indicating a value for the subject in the region of \$550,000.

8. Sale 5 should not be included as a comparable because there is no information presented on differences in market value between 48' and 60' lot frontages and because there are sufficient comparables without considering this property.

| RATING GRID | | | | |
|------------------------------|-----------------|-------------|-----------------|------------|
| | 1 | 2 | 3 | 4 |
| Sale Price | \$446,000 | \$476,000 | \$455,000 | \$472,000 |
| Time Adjustment ¹ | + 8,920 | + 30,940 | + 6,825 | + 2,360 |
| Roof ² | – 20,000 | – 20,000 | – 20,000 | – 20,000 |
| Square Footage ³ | + 21,000 | – 30,000 | + 48,750 | – 7,500 |
| Bathrooms ⁴ | + 15,000 | – 15,000 | – 15,000 | 0 |
| Bedrooms ⁵ | <u>+ 20,000</u> | <u>0</u> | <u>+ 10,000</u> | <u>0</u> |
| Net Adjustment | + \$44,920 | – \$ 34,060 | + \$30,575 | – \$25,140 |
| % Adjustment | 10.1% | 7.2% | 6.7% | 5.3% |
| Adjusted Sale Price | \$490,920 | \$441,940 | \$485,575 | \$446,860 |

The indicated market value of the subject property is in the range of \$446,860 to \$490,920. The large adjustment necessary for Sale 1 (10.1%) indicates that the comparable should probably be given less weight in the final value estimate. This indicates an adjusted price range of \$446,860 to \$485,575, and given the great similarity of Sale 4 with the subject property, the best prediction of market value is probably \$447,000.

Notes:

(1) Time Adjustment

$$\text{Sale 1 } 0.5\% \times \$446,000 \times 4 = \$8,920$$

$$\text{Sale 2 } [1\% \times \$476,000 \times 4] + [0.5\% \times \$476,000 \times 5] = \$30,940$$

$$\text{Sale 3 } 0.5\% \times \$455,000 \times 3 = \$6,825$$

$$\text{Sale 4 } 0.5\% \times \$472,000 \times 1 = \$2,360$$

(2) Roof

The subject property needs a new roof that will cost \$20,000, and therefore the comparables should be adjusted downwards.

(3) Square Footage

$$\text{Sale 1 } (1,600 - 1,460) \times \$150 = \$21,000$$

$$\text{Sale 2 } (1,600 - 1,800) \times \$150 = -\$30,000$$

$$\text{Sale 3 } (1,600 - 1,275) \times \$150 = \$48,750$$

$$\text{Sale 4 } (1,600 - 1,650) \times \$150 = -\$7,500$$

(4) Bathrooms

Sale 1: This comparable is adjusted upwards because it has one bathroom and the subject property has two bathrooms.

Sale 2 and 3: These comparables are adjusted downward because they have three bathrooms and the subject property has two bathrooms.

Sale 4: This comparable needs no adjustment because it has the same number of bathrooms as the subject property.

(5) Bedrooms

Sale 1: This comparable is adjusted upwards because it has two bedrooms and the subject property has four bedrooms.

Sale 2 and 4: These comparables need no adjustment because they have the same number of bedrooms as the subject property.

Sale 3: This comparable is adjusted upwards because it has three bedrooms and the subject property has four bedrooms.