Section\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_

Reason Using Properties from Algebra

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| Vocabulary | Definition | Example |
| ALGEBRAIC PROPERTIES of EQUALITYLet a, b and c be real numbers |
| ADDITION PROPERTY | If a = b, then a + \_\_\_ = b + \_\_\_. |  |
| SUBTRACTION PROPERTY | If a = b, then a - \_\_\_ = b - \_\_\_. |  |
| MULTIPLICATION PROPERTY | If a = b, then a\_\_\_ = b\_\_\_. |  |
| DIVISION PROPERTY | If a = b and c $\ne $ 0, then $\frac{a}{ }$ = $\frac{b}{ }$ . |  |
| SUBSTITUTION PROPERTY | If a = b, then a can be substituted for b in any equation or expression |  |
| DISTRIBUTIVE PROPERTY | a ( b + \_\_\_ ) = ab + a\_\_\_ |  |

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| REFLEXIVE PROPERTY of EQUALITY | Real Numbers | For any real number a, \_\_\_  **=** \_\_\_ |  |
| Segment Length | For any segment AB, \_\_\_  **=** \_\_\_ |  |
| Angle Measure | For any angle A, \_\_\_ **=** \_\_\_ |  |
| SYMMETRIC PROPERTY of EQUALITY | Real Numbers | For any real number a and b, If a = b, then b = \_\_\_. |  |
| Segment Length | For any segments AB and CD, If AB = CD, then CD = \_\_\_. |  |
| Angle Measure | For any angles A and B, If m‹A = m‹B, then the m‹B = \_\_\_ |  |
| TRANSITIVE PROPERTY of EQUALITY | Real Numbers | For any real numbers a, b, and c, If a = b and b = c, then a = \_\_\_. |  |
| Segment Length | For any segments AB, BC and EF,If AB = BC and CD = EF, then AB = \_\_\_. |  |
| Angle Measure | For any angles A, B, and C,If m‹A = m‹B and m‹B = m‹C, then m‹A = \_\_\_. |  |