1.3 Algebraic Properties

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| Property | Algebraic Example | Numerical Example |
| Distributive Property of Multiplication over Addition |  |  |
| Addition property of Equality |  |  |
| Subtraction Property of Equality |  |  |
| Multiplication Property of Equality |  |  |
| Division Property of Equality |  |  |
| Additive Inverse |  |  |
| Additive Identity |  |  |
| Multiplicative Inverse |  |  |
| Multiplicative Identity |  |  |
| Symmetric Property |  |  |
| Substitution Property |  |  |
| Multiplicative Property of 0 |  |  |
| Exponential Property of Equality |  |  |
| Commutative Property of Addition or Multiplication |  |  |
| Associative Property of Addition or Multiplication |  |  |

Name the property demonstrated:

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| 1. $9\*7=7\*9$
 | 1. $1\*mp=mp$
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| 1. If $x=3$, then $3x=15$
 | 1. If $x=6$, then $6=x$
 |

1. A football team is on the 35 yard line. The quarterback is sacked at the line of scrimmage. The team gains 0 yards. Which identity or property does this represent? Explain.
2. Shelly house is 4 miles from the school and the school is the same distance from Shelly’s house. Which property does this represent? Explain.