

4.1 Day 2 Worksheet Answers

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| 1. Transitive Property of Equality | 4. Multiplication Property of Equality | 7. B |
| 2. Combining Like Terms | 5. Reflexive Property of Equality | 8. B |
| 3. Reflexive Property of Equality | 6. Symmetric Property of Equality | 9. B |
| | | 10. A |

11.

Statements	Reason
$AC = BD$	Given
$AC = AB + BC, BD = BC + CD$	Segment Addition Postulate
$AB + BC = BC + CD$	Substitution Property of Equality
$AB = CD$	Subtraction Property of Equality

12.

Statements	Reason
R, J, M are collinear. $RJ = 3, RM = 8$	Given
$RJ + JM = RM$	Segment Addition Postulate
$3 + JM = 8$	Substitution Property of Equality
$JM = 5$	Subtraction Property of Equality

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| 13. (2) C | 14. (1) A, B, C | 15. (2) B |
| (3) B | (2) H | (3) A |
| (4) D | (3) D | (4) E |
| (5) A | (4) G | (5) D |
| | (5) F | (6) F |
| | (6) E | (7) C |

16.

Statements	Reason
(1) $-6(1 - 5x) = 54$	Given
(2) $-6 + 30x = 54$	Distributive Property
(3) $30x = 60$	Addition Property of Equality
(4) $x = 2$	Division Property of Equality

17.

Statements	Reason
(1) $XY = 3x + 1, YZ = 58 - 3x, XZ = x^2 + 10$	Given
(2) $XZ = XY + YZ$	Segment Addition Postulate
(3) $x^2 + 10 = 3x + 1 + 58 - 3x$	Substitution Property
(4) $x^2 + 10 = 59$	Combine Like Terms
(5) $x^2 = 49$	Subtraction Property of Equality
(6) $x = 7$	Square Root Property of Equality