

## 4.1 Day 1 Worksheet Answers

1. C
2. Addition Property of Equality
3. Substitution Property
4. Transitive Property of Equality
5. Multiplication Property of Equality
6. Segment Addition Postulate
7. Substitution Property
- 8.

Statements	Reason
B is between A and C	<b>Given</b>
$AB + BC = AC$	<b>Segment Addition Postulate</b>
$AB = AC - BC$	<b>Subtraction Property of Equality</b>

9.

Statements	Reason
K is between J and L	<b>Given</b>
$JK = 6, KL = 10$	<b>Given</b>
$JL = JK + KL$	<b>Segment Addition Postulate</b>
$JL = 6 + 10$	<b>Substitution Property</b>
$JL = 16$	<b>Simplify</b>

10. Transitive Property
11. Substitution Property
12. Segment Addition Postulate
13. Answers may vary ... Giving the specific reasons for each step in the problem.
14. Answers may vary... Statement(s) you can assume are true to start a problem.
15. Answers may vary
16. Answers may vary ...  $a=a$
17. Answers may vary ... If  $a=b$  then  $b=a$
18. Answers may vary ... If  $a=b$  and  $b=c$ , then  $a=c$
- 19.

Statements	Reason
$55x - 3(9x + 12) = -64$	<b>Given</b>
$55x - 27x - 36 = -64$	<b>Distributive Property</b>
$28x - 36 = -64$	<b>Combine Like Terms</b>
$28x = -28$	<b>Addition Property of Equality</b>
$x = -1$	<b>Division Property of Equality</b>

20.

Statements	Reason
$3(x^2 - 9) = 48$	<b>Given</b>
$3x^2 - 27 = 48$	<b>Distributive Property</b>
$3x^2 = 75$	<b>Addition Property of Equality</b>
$x^2 = 25$	<b>Division Property of Equality</b>
$x = \pm 5$	<b>Square Root Property of Equality</b>