Int Math Name_____

6-1 Segment Addition Postulate (ver5)_hw

Date_____ Period____

Points A, B, and C are collinear. Point B is between A and C. Find the length indicated.

1) $AB = x + 17$, $AC = 2x + 29$, and $BC = 2$. Find AC.

2) $AC = 3x - 2$, $AB = 2x - 5$, and $BC = 9$. Find AB.

3) Find AC if $AB = 11$, $BC = x + 6$, and $AC = 2x + 11$.

4) $AC = 7x + 3$, $BC = 12$, and $AB = 3x - 1$. Find AB.

5) $AC = 4x$, $BC = 7$, and $AB = x + 2$. Find AC.

6) Find BC if $AC = x + 5$, $BC = 2x - 12$, and $AB = 5$.

7) $AB = 4$, $AC = x + 21$, and $BC = 2x + 26$. Find BC.

8) $BC = 2x + 2$, $AB = 3$, and $AC = 3x + 2$. Find BC.

9) Find BC if $AB = 2x + 19$, $BC = x + 20$, and $AC = 12$.

10) Find AC if $AC = x + 30$, $AB = 2x + 35$, and $BC = 7$.

11) $BC = x + 3$, $AB = 2$, and $AC = 2x - 2$. Find AC.

12) $AC = 11$, $BC = 5x$, and $AB = 2x - 3$. Find BC.

13) Find AC if $BC = 2x + 30$, $AB = 11$, and $AC = x + 30$.

14) Find AC if $AB = 6$, $AC = x + 14$, and $BC = 15 + 2x$.

15) $BC = x + 5$, $AC = 13$, and $AB = 2x + 8$. Find AB.

16) Find AC if $AC = 3x - 8$, $BC = 8$, and $AB = x$.

17) Find AB if $BC = 10$, $AB = 2x + 25$, and $AC = 26 + x$.

18) Find AB if $AC = 14$, $AB = 2x - 6$, and $BC = 2x - 8$.

19) Find AB if $AC = x + 17$, $BC = 12$, and $AB = 2x + 9$.

20) Find AB if $BC = x + 5$, $AC = 8$, and $AB = x + 9$.

21) Find BC if $BC = x - 2$, $AC = 2x - 2$, and $AB = 10$.

22) Find AB if $AC = 2x - 1$, $BC = 9$, and $AB = -1 + x$.

23) $AC = x + 14$, $AB = 1$, and $BC = 2x + 20$. Find AC.

24) $AB = 3x - 1$, $AC = 13$, and $BC = 2x - 6$. Find AB.

25) $BC = x + 17$, $AB = 28 + 2x$, and $AC = 15$. Find BC.

26) $AB = 2x - 2$, $BC = 10$, and $AC = 3x + 3$. Find AC.

27) $AB = 2x + 23$, $AC = x + 18$, and $BC = 6$. Find AB.

28) $AB = 10x + 1$, $BC = 3$, and $AC = 13x + 1$. Find AC.

29) Find BC if $AC = x + 22$, $AB = 5$, and $BC = 27 + 2x$.

30) Find BC if $AC = 22$, $BC = x + 18$, and $AB = x + 16$.

31) Find BC if $AC = 17$, $BC = x + 11$, and $AB = x + 10$.

32) Find AB if $AB = 3x - 3$, $AC = 19$, and $BC = -3 + 2x$.

33) Find AC if $AC = x + 23$, $AB = 7$, and $BC = 2x + 27$.

34) Find BC if $AC = x + 4$, $BC = 2x - 15$, and $AB = 11$.

35) Find AC if $AB = x$, $AC = 2x - 4$, and $BC = 4$.

36) $AB = 2x + 19$, $AC = x + 21$, and $BC = 11$. Find AC.

37) $AB = 6$, $BC = 2x + 3$, and $AC = 7x - 1$. Find BC.

38) Find AC if $AC = 2x + 27$, $AB = x + 11$, and $BC = 6$.

39) Find BC if $AC = 15$, $BC = 2x + 13$, and $AB = x + 17$.

40) Find BC if $BC = 3x - 4$, $AB = 3x - 3$, and $AC = 23$.

Answers to 6-1 Segment Addition Postulate (vers5)_hw

1) 9	2) 7	3) 23	4) 5
5) 12	6) 12	7) 8	8) 8
9) 11	10) 18	11) 12	12) 10
13) 19	14) 7	15) 8	16) 16
17) 7	18) 8	19) 1	20) 6
21) 8	22) 8	23) 7	24) 11
25) 7	26) 18	27) 1	28) 14
29) 7	30) 12	31) 9	32) 12
33) 12	34) 1	35) 12	36) 12
37) 7	38) 7	39) 3	40) 11