

## 6-1 Segment Addition Postulate (ver2)\_hw

Date \_\_\_\_\_ Period \_\_\_\_\_

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

- 1) Find  $AC$  if  $BC = 6$  and  $AB = 10$ .
- 2) Find  $BC$  if  $AB = 11$  and  $AC = 15$ .
- 3) Find  $BC$  if  $AB = 10$  and  $AC = 22$ .
- 4)  $AB = 3$  and  $BC = 12$ . Find  $AC$ .
- 5) Find  $BC$  if  $AC = 19$  and  $AB = 11$ .
- 6)  $AC = 9$  and  $BC = 1$ . Find  $AB$ .
- 7)  $AB = 7$  and  $BC = 10$ . Find  $AC$ .
- 8) Find  $AC$  if  $BC = 9$  and  $AB = 3$ .

**Points A, B, C, and D are collinear and positioned in that order. Find the length indicated.**

- 9)  $AD = 21$ ,  $AC = 13$ , and  $BC = 10$ . Find  $BD$ .
- 10)  $AB = 11$ ,  $AD = 22$ , and  $BC = 9$ . Find  $CD$ .
- 11)  $BD = 13$ ,  $BC = 11$ , and  $AD = 19$ . Find  $AC$ .
- 12) Find  $BC$  if  $AC = 20$ ,  $AD = 23$ , and  $BD = 15$ .
- 13) Find  $BC$  if  $BD = 4$ ,  $AC = 11$ , and  $AD = 12$ .
- 14)  $BD = 14$ ,  $AC = 11$ , and  $BC = 7$ . Find  $AD$ .
- 15) Find  $AB$  if  $CD = 7$ ,  $AD = 17$ , and  $BC = 1$ .
- 16)  $BD = 17$ ,  $AD = 26$ , and  $BC = 10$ . Find  $AC$ .
- 17)  $AD = 22$ ,  $AB = 6$ , and  $CD = 7$ . Find  $BC$ .
- 18)  $AD = 11$ ,  $BC = 3$ , and  $BD = 4$ . Find  $AC$ .

19)  $AB = 9$ ,  $BC = 5$ , and  $AD = 16$ . Find  $CD$ .

20)  $BD = 12$ ,  $AD = 17$ , and  $AC = 9$ . Find  $BC$ .

21) Find  $BD$  if  $AC = 9$ ,  $AD = 17$ , and  $BC = 7$ .

22) Find  $AD$  if  $AC = 18$ ,  $BD = 18$ , and  $BC = 10$ .

23) Find  $BD$  if  $AC = 18$ ,  $BC = 10$ , and  $AD = 25$ .

24)  $AD = 31$ ,  $CD = 8$ , and  $AB = 11$ . Find  $BC$ .

25) Find  $AB$  if  $CD = 2$ ,  $BC = 12$ , and  $AD = 15$ .

26) Find  $AC$  if  $AD = 16$ ,  $BC = 4$ , and  $BD = 12$ .

27)  $AD = 14$ ,  $BC = 1$ , and  $AC = 6$ . Find  $BD$ .

28)  $AC = 24$ ,  $CD = 12$ , and  $AB = 12$ . Find  $BD$ .

29)  $AD = 24$ ,  $CD = 8$ , and  $AB = 12$ . Find  $BC$ .

30)  $AC = 16$ ,  $BC = 7$ , and  $BD = 8$ . Find  $AD$ .

31) Find  $AD$  if  $BC = 10$ ,  $AC = 13$ , and  $BD = 15$ .

32) Find  $AB$  if  $AD = 26$ ,  $CD = 12$ , and  $BC = 5$ .

33) Find  $BD$  if  $CD = 12$ ,  $AB = 7$ , and  $AC = 19$ .

34) Find  $BC$  if  $AB = 12$ ,  $AD = 15$ , and  $CD = 1$ .

35) Find  $BC$  if  $BD = 15$ ,  $AD = 21$ , and  $AC = 14$ .

36) Find  $CD$  if  $AD = 25$ ,  $AB = 7$ , and  $BC = 9$ .

37)  $BD = 13$ ,  $AD = 24$ , and  $AC = 14$ . Find  $BC$ .

38) Find  $BD$  if  $AC = 12$ ,  $BC = 11$ , and  $AD = 14$ .

39) Find  $AB$  if  $BC = 8$ ,  $CD = 7$ , and  $AD = 22$ .

40)  $AD = 15$ ,  $BC = 1$ , and  $CD = 9$ . Find  $AB$ .

Answers to 6-1 Segment Addition Postulate (ver2)\_hw

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