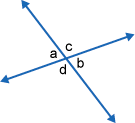
Use the figure below for problems #1 and #2:

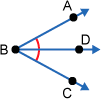


1.What is the relationship between https://my.westcottcourses.com/images/common/angleNOarc.gifa and https://my.westcottcourses.com/images/common/angleNOarc.gifb?

2. What is the relationship between https://my.westcottcourses.com/images/common/angleNOarc.gifc and https://my.westcottcourses.com/images/common/angleNOarc.gifd?

Find the following:

3.Express the following in proper notation:  
  
https://my.westcottcourses.com/images/homework/planegeometry/planegeometryhw1.4.3.gif

4.Express the following in proper notation:  
  


5.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 50o and https://my.westcottcourses.com/images/common/angleNOarc.gifB is a right angle,   find https://my.westcottcourses.com/images/common/angleNOarc.gifA.

6.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifA = 60o and https://my.westcottcourses.com/images/common/angleNOarc.gifB = 140o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifC.

7.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifA = 50o and https://my.westcottcourses.com/images/common/angleNOarc.gifB = 160o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifC.

8.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 35o and https://my.westcottcourses.com/images/common/angleNOarc.gifB = 82o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifA.

9.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 84o and https://my.westcottcourses.com/images/common/angleNOarc.gifA = 31o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifB.

10.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 62o and https://my.westcottcourses.com/images/common/angleNOarc.gifA = 24o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifB.

11.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 38o and https://my.westcottcourses.com/images/common/angleNOarc.gifA = 43o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifB.

12.If https://my.westcottcourses.com/images/common/angleNOarc.gifB https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA + https://my.westcottcourses.com/images/common/angleNOarc.gifC,   https://my.westcottcourses.com/images/common/angleNOarc.gifC = 46o and https://my.westcottcourses.com/images/common/angleNOarc.gifA = 29o,   find https://my.westcottcourses.com/images/common/angleNOarc.gifB.

13.If https://my.westcottcourses.com/images/common/angleNOarc.gifA = 24o,   find 3(https://my.westcottcourses.com/images/common/angleNOarc.gifA).

14.If https://my.westcottcourses.com/images/common/angleNOarc.gifA = 61o,   find 2(https://my.westcottcourses.com/images/common/angleNOarc.gifA).

15.If https://my.westcottcourses.com/images/common/angleNOarc.gifA = 34o,   find 4(https://my.westcottcourses.com/images/common/angleNOarc.gifA).

16.If https://my.westcottcourses.com/images/common/angleNOarc.gifA = 24o,   find 5(https://my.westcottcourses.com/images/common/angleNOarc.gifA).

17.If https://my.westcottcourses.com/images/common/angleNOarc.gifB = 260o,   find  https://my.westcottcourses.com/images/common/angleNOarc.gifB   
.

18.If https://my.westcottcourses.com/images/common/angleNOarc.gifB = 183o,   find  https://my.westcottcourses.com/images/common/angleNOarc.gifB   
.

19.If https://my.westcottcourses.com/images/common/angleNOarc.gifB = 156o,   find  https://my.westcottcourses.com/images/common/angleNOarc.gifB   
.

20.If https://my.westcottcourses.com/images/common/angleNOarc.gifB = 245o,   find  https://my.westcottcourses.com/images/common/angleNOarc.gifB   
.

21.Name the property:    https://my.westcottcourses.com/images/common/congruence.gif

22.Name the property:   If https://my.westcottcourses.com/images/common/angleNOarc.gifR https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifS,   https://my.westcottcourses.com/images/common/angleNOarc.gifS https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifT,   then https://my.westcottcourses.com/images/common/angleNOarc.gifR https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifT.

23.Name the property:   If  https://my.westcottcourses.com/images/common/congruence.gif ,   then  +  https://my.westcottcourses.com/images/common/congruence.gif  + .

24.Name the property:   If  https://my.westcottcourses.com/images/common/congruence.gif ,   then  https://my.westcottcourses.com/images/common/congruence.gif .

25.Name the property:   If  https://my.westcottcourses.com/images/common/congruence.gif , and  https://my.westcottcourses.com/images/common/congruence.gif ,   then  https://my.westcottcourses.com/images/common/congruence.gif .

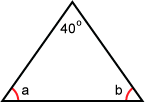
26.Name the property:   https://my.westcottcourses.com/images/common/angleNOarc.gifA https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifA

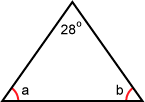
27.Name the property:   If https://my.westcottcourses.com/images/common/angleNOarc.gifR https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifS,   then https://my.westcottcourses.com/images/common/angleNOarc.gifS https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifR.

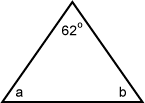
28.Name the property:   If https://my.westcottcourses.com/images/common/angleNOarc.gifD https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifE,   then https://my.westcottcourses.com/images/common/angleNOarc.gifD + https://my.westcottcourses.com/images/common/angleNOarc.gifF https://my.westcottcourses.com/images/common/congruence.gif https://my.westcottcourses.com/images/common/angleNOarc.gifE + https://my.westcottcourses.com/images/common/angleNOarc.gifF.

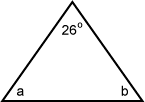
29.Find angles a, b, and c.  
  


30.Find angles a and b.  
  


31.Find angles a and b.  
  


32.Find angles a and b.  
  


33.If   https://my.westcottcourses.com/images/common/angleNOarc.gifa = x + 4 and https://my.westcottcourses.com/images/common/angleNOarc.gifb = x + 2, find x,   https://my.westcottcourses.com/images/common/angleNOarc.gifa   and   https://my.westcottcourses.com/images/common/angleNOarc.gifb.  
  


34.If https://my.westcottcourses.com/images/common/angleNOarc.gifa = x + 5 and https://my.westcottcourses.com/images/common/angleNOarc.gifb = x + 3, find x,   https://my.westcottcourses.com/images/common/angleNOarc.gifa   and   https://my.westcottcourses.com/images/common/angleNOarc.gifb.  
  


Use the figure below for problems #35 - #40.



35.If   https://my.westcottcourses.com/images/common/angleNOarc.gif1 = x + 6   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 2x - 1,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

36.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 = 4x - 2   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 3x + 6,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

37.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 = 8x + 4   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 3x + 14,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

38.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 = 4x - 2   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 2x + 10,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

39.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 = 4x + 6   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = x + 15,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

40.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 = 6x + 4   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 2x + 28,   find x,   https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

Find the following:

41.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 is three times https://my.westcottcourses.com/images/common/angleNOarc.gif2,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 92o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

42.If https://my.westcottcourses.com/images/common/angleNOarc.gif2 is two times https://my.westcottcourses.com/images/common/angleNOarc.gif1,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 144o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

43.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 is two more than four times https://my.westcottcourses.com/images/common/angleNOarc.gif2,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 167o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

44.If https://my.westcottcourses.com/images/common/angleNOarc.gif2 is three more than two times https://my.westcottcourses.com/images/common/angleNOarc.gif1,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 54o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

45.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 is five less than three times https://my.westcottcourses.com/images/common/angleNOarc.gif2,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 171o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

46.If https://my.westcottcourses.com/images/common/angleNOarc.gif2 is four less than five times https://my.westcottcourses.com/images/common/angleNOarc.gif1,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 158o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

47.If https://my.westcottcourses.com/images/common/angleNOarc.gif1 is six more than half https://my.westcottcourses.com/images/common/angleNOarc.gif2,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 252o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.

48.If https://my.westcottcourses.com/images/common/angleNOarc.gif2 is ten more than half https://my.westcottcourses.com/images/common/angleNOarc.gif1,   and   https://my.westcottcourses.com/images/common/angleNOarc.gif1 + https://my.westcottcourses.com/images/common/angleNOarc.gif2 = 286o,   find https://my.westcottcourses.com/images/common/angleNOarc.gif1   and   https://my.westcottcourses.com/images/common/angleNOarc.gif2.