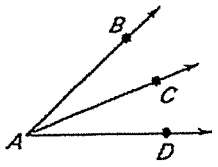
Name:_____ Date:_____

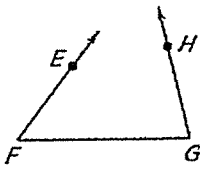
Angle Pair Relationships Practice Worksheet

Are the indicated angles *adjacent*?

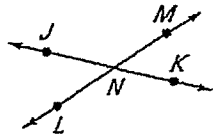
1._____ $\angle BAC$ and $\angle CAD$



2._____ $\angle EFG$ and $\angle HGF$



3._____ $\angle JNM$ and $\angle LNK$



$\angle 1$ and $\angle 2$ are *complementary* angles. Given the measure of $\angle 1$, find $m\angle 2$.

6. $m\angle 1=52°$, $m\angle 2=$_____

7. $m\angle 1=76°$, $m\angle 2=$_____

8. $m\angle 1=19°$, $m\angle 2=$_____

$\angle 1$ and $\angle 2$ are *supplementary* angles. Given the measure of $\angle 1$, find $m\angle 2$.

9. $m\angle 1=52°$, $m\angle 2=$_____

10. $m\angle 1=76°$, $m\angle 2=$_____

11. $m\angle 1=19°$, $m\angle 2=$_____

Using the diagram, tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.

12._____ $\angle 1$ and $\angle 2$

13._____ $\angle 1$ and $\angle 3$

14._____ $\angle 1$ and $\angle 4$

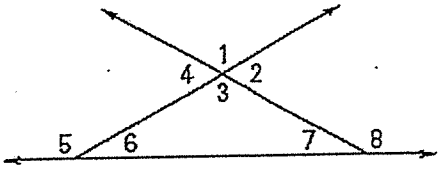
15._____ $\angle 1$ and $\angle 5$

16._____ $\angle 1$ and $\angle 6$

17._____ $\angle 1$ and $\angle 7$

18._____ $\angle 1$ and $\angle 8$

19._____ $\angle 2$ and $\angle 4$

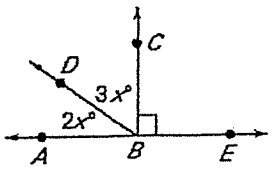


Use the diagrams to find the indicated measurements.

20. x =_____

$m\angle ABD$ =_____

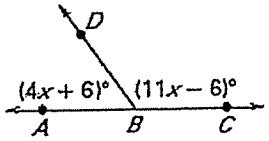
$m\angle DBC$ =_____



21. x =_____

$m\angle ABD$ =_____

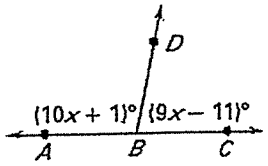
$m\angle DBC$ =_____



22. x =_____

$m\angle ABD$ =_____

$m\angle DBC$ =_____

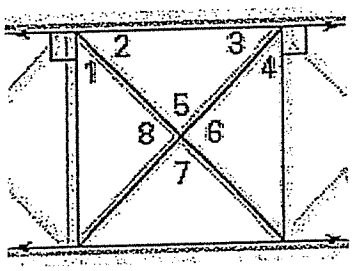


Given: $m\angle A = (4x-2)°$ and $m\angle B = (11x+17)°$

23. Find x if the angles are *complementary*.

24. Find x if the angles are *supplementary*.

Stair Railing: A stair railing is designed as shown in the figure.
Use the angles identified in the figure to **name *two* pairs** of the indicated type of angle pair.



25. Complementary angles ∠ &∠ ∠ &∠

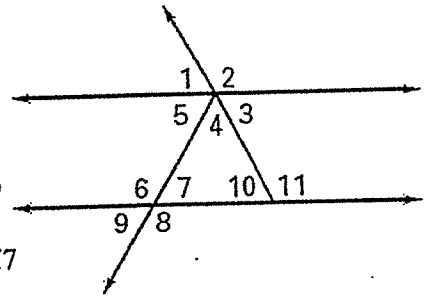
26. Supplementary angles ∠ &∠ ∠ &∠

28. Vertical angles ∠ &∠ ∠ &∠

29. Linear pair ∠ &∠ ∠ &∠

30. Adjacent angles ∠ &∠ ∠ &∠

Using the diagram, tell whether the angles are *vertical angles,* a *linear pair,* or *neither.*



31. _____ ∠1 and ∠2

32. _____ ∠1 and ∠3

33. _____ ∠2 and ∠4

34. _____ ∠4 and ∠5

35. _____ ∠6 and ∠8

36. _____ ∠8 and ∠9

37. _____ ∠11 and ∠10

38. _____ ∠10 and ∠7