Are tne indicated angles *adjacent*?

1._____ ∠BAC and ∠CAD   2._____ ∠EFG and ∠HGF   3._____ ∠JNM and ∠LNK
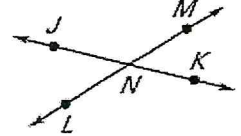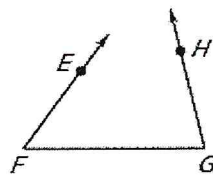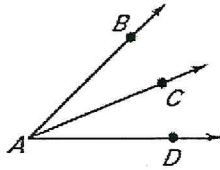
∠ 1 and ∠ 2 are *complementary* angles. Given the measure of ∠1, find $m\angle 2$. (Show arithmetic)

6. $m\angle 1=52°$, $m\angle 2 =$ _____   7. $m\angle 1=76°$, $m\angle 2 =$ _____   8. $m\angle 1=19°$, $m\angle 2 =$ _____

∠ 1 and ∠ 2 are *supplementary* angles. Given the measure of ∠1, find $m\angle 2$. (show arithmetic)

9. $m\angle 1=52°$, $m\angle 2 =$ _____   10. $m\angle 1=76°$, $m\angle 2 =$ _____   11. $m\angle 1=19°$, $m\angle 2 =$ _____
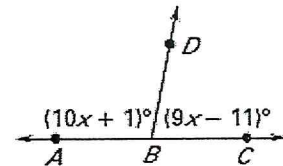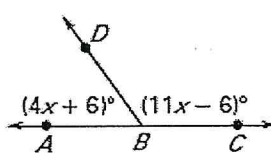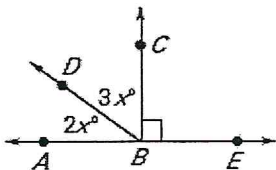
Using the diagram, tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.

12._____ ∠1 and ∠2   13._____ ∠1 and ∠3

14._____ ∠1 and ∠4   15._____ ∠1 and ∠5

16._____ ∠1 and ∠6   17._____ ∠1 and ∠7

18._____ ∠1 and ∠8   19._____ ∠2 and ∠4
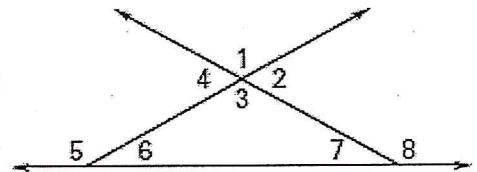
Use the diagrams to find the indicated measurements. You must show all work

20. x = _____   21. x = _____   22. x = _____

   $m\angle ABD =$ _____ $m\angle ABD =$ _____ $m\angle ABD =$ _____

   $m\angle DBC =$ _____ $m\angle DBC =$ _____ $m\angle DBC =$ _____

Given: $m\angle A = (4x - 2)°$ and $m\angle B = (11x + 17)°$ You must show all work.

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