Geometry Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1.5: Pairs of Angles

Use the figure at the right to answer the following.

1. Are 1 and2 a linear pair? Are they adjacent?

2. Are 4 and 5 a linear pair? Are they adjacent?

3. Are 3 and 1 vertical angles? Are they adjacent?

4. Are 2 and 5 vertical angles? Are they adjacent?

Use the figure at the right to answer the following.



5. If m6 = 51, then m7 = \_\_\_\_\_\_\_\_\_.

6. If m8 = 103, then m6 = \_\_\_\_\_\_\_\_.

7. If m9 = 136, then m8 = \_\_\_\_\_\_\_\_.

8. If m7 = 53, then m9 = \_\_\_\_\_\_\_\_\_.

In exercises 9 – 12, assume A and B are complementary and B and C are supplementary.

9. If mA = 48, then mB = \_\_\_\_\_\_\_\_\_\_ and mC = \_\_\_\_\_\_\_\_\_\_\_\_.

10. If mB = 83, then mA = \_\_\_\_\_\_\_\_\_ and mC = \_\_\_\_\_\_\_\_\_\_\_\_.

11. If mC = 127, then mB = \_\_\_\_\_\_\_\_\_ and mA = \_\_\_\_\_\_\_\_\_\_\_.

12. If mA = 45, then mB = \_\_\_\_\_\_\_\_\_ and mC = \_\_\_\_\_\_\_\_\_\_\_\_.

Find the value of the following variables. SHOW ALL WORK!!



13. 14.



15. 16.

For exercises 17-18 ABD and DBE are supplementary. Find the measures of both angles. SHOW ALL WORK.

17. mABD = 5x , mDBE = (17x – 18) 

18. mABD = (12x - 12), mDBE = (3x + 48)