5: Complementary, Supplementary, Vertical Angles wkst.
Geometry
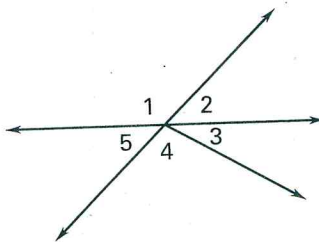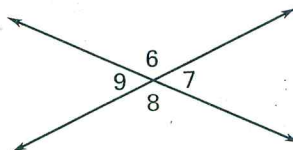Ms. O Rielly

Name: _____ DATE _____

Use the figure at the right.

1. Are $\angle 1$ and $\angle 2$ adjacent?

2. Are $\angle 1$ and $\angle 2$ a linear pair?

3. Are $\angle 3$ and $\angle 4$ a linear pair?

4. Are $\angle 2$ and $\angle 5$ vertical angles?

5. Are $\angle 1$ and $\angle 4$ vertical angles?

6. Are $\angle 3$ and $\angle 5$ vertical angles?

Use the figure at the right.

7. If $m\angle 6 = 78°$, then $m\angle 7 = $ __?__ .

8. If $m\angle 8 = 94°$, then $m\angle 6 = $ __?__ .

9. If $m\angle 9 = 124°$, then $m\angle 8 = $ __?__ .

10. If $m\angle 7 = 47°$, then $m\angle 9 = $ __?__ .

11. If $m\angle 8 = 158°$, then $m\angle 9 = $ __?__ .

12. If $m\angle 7 = 15°$, then $m\angle 6 = $ __?__ .

In Exercises 13–16, assume $\angle A$ and $\angle B$ are complementary and $\angle B$ and $\angle C$ are supplementary.

13. If $m\angle A = 42°$, then $m\angle B = $ __?__ and $m\angle C = $ __?__ .

14. If $m\angle B = 78°$, then $m\angle A = $ __?__ and $m\angle C = $ __?__ .

15. If $m\angle A = 17°$, then $m\angle B = $ __?__ and $m\angle C = $ __?__ .

16. If $m\angle B = 45°$, then $m\angle A = $ __?__ and $m\angle C = $ __?__ .

Find the value of the variable.

17.

$110°$

$(2x + 40)°$

18.

$x°$ $(5x - 48)°$

19.

$64°$ $(48 + x)°$

20.

$75°$ $(2x - 5)°$

21.

$(3x + 8)°$
$x°$

22.

$(2x + 8)°$ $(3x + 17)°$

Geometry
Chapter 1 Resource Book