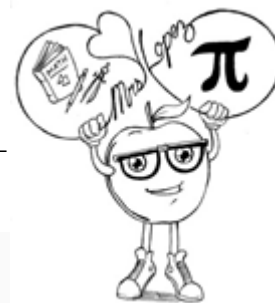


ASSIGNMENT #17: Linear Pairs and Vertical Angles

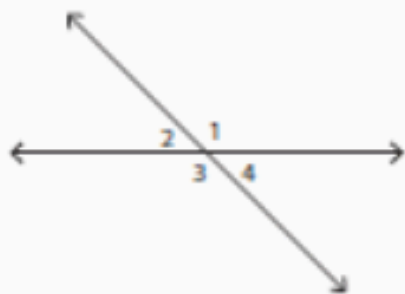


Name: _____ Period: _____ Date: _____

Find all the missing angles.

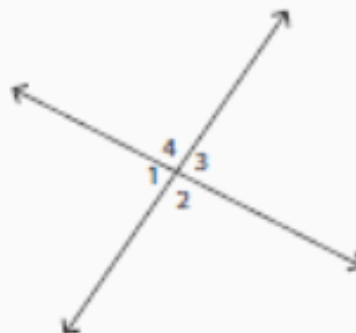
Score: _____ / 10

1)



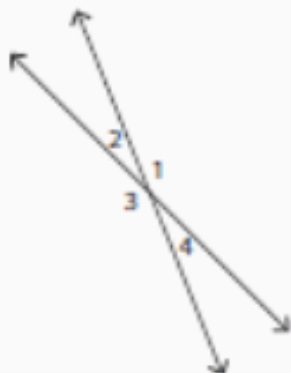
$m\angle 1 = \underline{\hspace{1cm}}$ $m\angle 2 = \underline{45^\circ}$
 $m\angle 3 = \underline{\hspace{1cm}}$ $m\angle 4 = \underline{\hspace{1cm}}$

2)



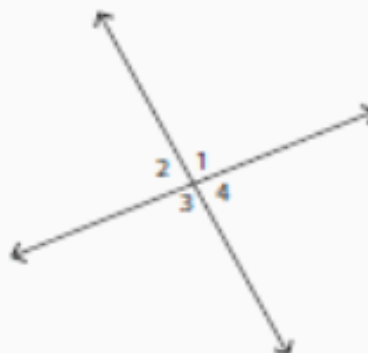
$m\angle 1 = \underline{\hspace{1cm}}$ $m\angle 2 = \underline{\hspace{1cm}}$
 $m\angle 3 = \underline{83^\circ}$ $m\angle 4 = \underline{\hspace{1cm}}$

3)



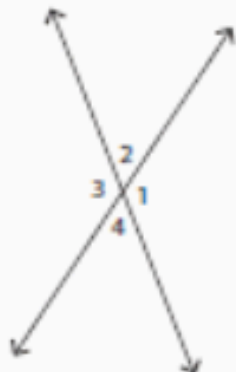
$m\angle 1 = \underline{157^\circ}$ $m\angle 2 = \underline{\hspace{1cm}}$
 $m\angle 3 = \underline{\hspace{1cm}}$ $m\angle 4 = \underline{\hspace{1cm}}$

4)



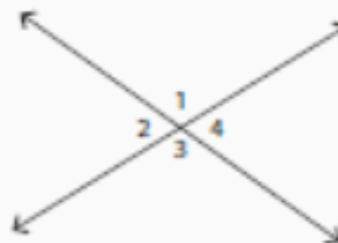
$m\angle 1 = \underline{\hspace{1cm}}$ $m\angle 2 = \underline{\hspace{1cm}}$
 $m\angle 3 = \underline{\hspace{1cm}}$ $m\angle 4 = \underline{82^\circ}$

5)



$m\angle 1 = \underline{\hspace{1cm}}$ $m\angle 2 = \underline{55^\circ}$
 $m\angle 3 = \underline{\hspace{1cm}}$ $m\angle 4 = \underline{\hspace{1cm}}$

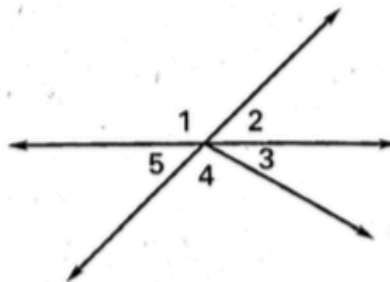
6)



$m\angle 1 = \underline{\hspace{1cm}}$ $m\angle 2 = \underline{\hspace{1cm}}$
 $m\angle 3 = \underline{113^\circ}$ $m\angle 4 = \underline{\hspace{1cm}}$

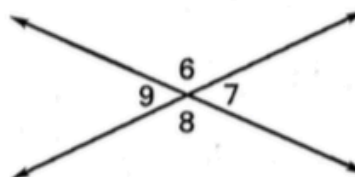
Use the figure at the right.

1. Are $\angle 1$ and $\angle 2$ a linear pair?
2. Are $\angle 4$ and $\angle 5$ a linear pair?
3. Are $\angle 3$ and $\angle 1$ vertical angles?
4. Are $\angle 2$ and $\angle 5$ vertical angles?



Use the figure at the right.

5. If $m\angle 6 = 51^\circ$, then $m\angle 7 = \underline{\quad ? \quad}$.
6. If $m\angle 8 = 103^\circ$, then $m\angle 6 = \underline{\quad ? \quad}$.
7. If $m\angle 9 = 136^\circ$, then $m\angle 8 = \underline{\quad ? \quad}$.
8. If $m\angle 7 = 53^\circ$, then $m\angle 9 = \underline{\quad ? \quad}$.



In Exercises 9–12, assume $\angle A$ and $\angle B$ are complementary and $\angle B$ and $\angle C$ are supplementary.

9. If $m\angle A = 48^\circ$, then $m\angle B = \underline{\quad ? \quad}$ and $m\angle C = \underline{\quad ? \quad}$.
10. If $m\angle B = 83^\circ$, then $m\angle A = \underline{\quad ? \quad}$ and $m\angle C = \underline{\quad ? \quad}$.
11. If $m\angle C = 127^\circ$, then $m\angle B = \underline{\quad ? \quad}$ and $m\angle A = \underline{\quad ? \quad}$.
12. If $m\angle A = 25^\circ$, then $m\angle B = \underline{\quad ? \quad}$ and $m\angle C = \underline{\quad ? \quad}$.

Do the following problems on a separate sheet of paper.

Find the value(s) of the variable(s).

