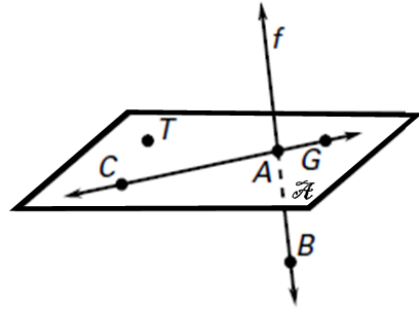


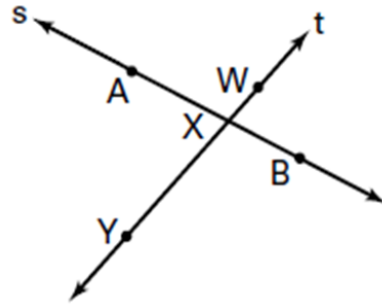
# CHAPTER 1: REVIEW

NAME \_\_\_\_\_

1. Give two other names for  $\overleftrightarrow{AB}$
2. Name three points that are collinear.
3. Name a point not coplanar with A, C, and T.
4. Name another name for Plane  $\mathcal{H}$ .

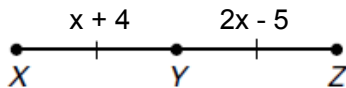


5. What is another name for  $\overleftrightarrow{WX}$ ?
6. Name all rays with endpoint  $X$ .
7. Name the ray opposite of  $\overrightarrow{XA}$ .
8. What is another name for  $\overleftrightarrow{WY}$ ?

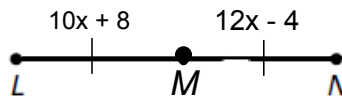


**Find the indicated length.**

9.  $YZ$



10.  $LN$



**Find the exact distance between the points.**

11.  $A(2, 3)$  and  $B(4, 9)$

12.  $F(-4, 6)$  and  $G(1, 8)$

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

**Find the coordinates of the midpoint of the segment with the given endpoints.**

13.  $A(-1, 4)$  and  $B(3, 6)$

14.  $C(2, -3)$  and  $D(-4, -1)$

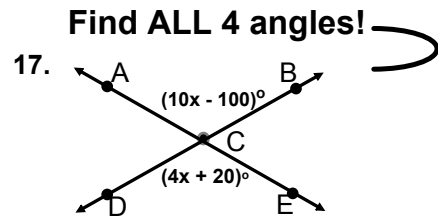
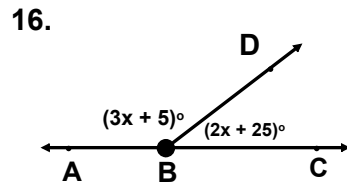
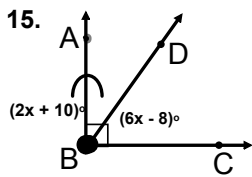
$$\frac{x_1 + x_2}{2} = x_m$$

$$\frac{x_1 + x_2}{2} = x_m$$

$$\frac{y_1 + y_2}{2} = y_m$$

$$\frac{y_1 + y_2}{2} = y_m$$

Find each angle measure.



In Exercises 18–20,  $\angle 1$  and  $\angle 2$  are complementary angles. Given the measure of  $\angle 1$ , find  $m\angle 2$ .

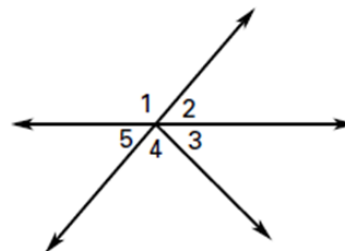
18.  $m\angle 1 = 87^\circ$       19.  $m\angle 1 = 15^\circ$       20.  $m\angle 1 = 71^\circ$

In Exercises 21–23,  $\angle 1$  and  $\angle 2$  are supplementary angles. Given the measure of  $\angle 1$ , find  $m\angle 2$ .

21.  $m\angle 1 = 8^\circ$       22.  $m\angle 1 = 87^\circ$       23.  $m\angle 1 = 115^\circ$

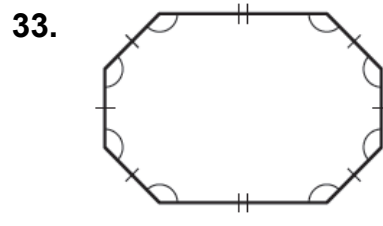
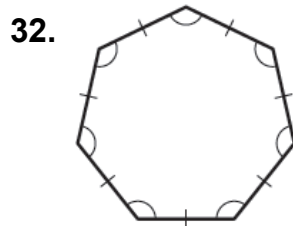
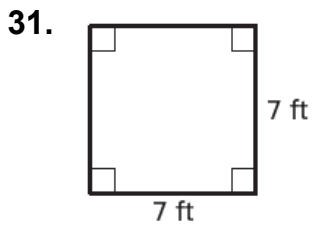
In Exercises 24–26, use the diagram. Tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.

24.  $\angle 1$  and  $\angle 2$   
 25.  $\angle 2$  and  $\angle 5$   
 26.  $\angle 1$  and  $\angle 4$

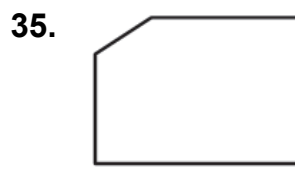


27. Given that  $\angle 1$  is a complement of  $\angle 2$  and  $m\angle 2 = 34^\circ$ , find  $m\angle 1$ .
28. Given that  $\angle 3$  is a supplement of  $\angle 4$  and  $m\angle 3 = 56^\circ$ , find  $m\angle 4$ .
29. Two angles form a linear pair. The measure of one angle is six more than four times the measure of the other angle. Find the measure of each angle.
30. Two angles form a linear pair. The measure of one angle is two times greater than the measure of the other angle. Find the measure of each angle.

Classify the polygon by the number of sides. Tell whether the polygon is equilateral, equiangular, or regular. Explain your reasoning.



Tell whether the figure is a polygon. If it is not, explain why. If it is a polygon, tell whether it is convex or concave.



Each figure is a regular polygon. Expressions are given for two side lengths. Find the value of  $x$ .

