

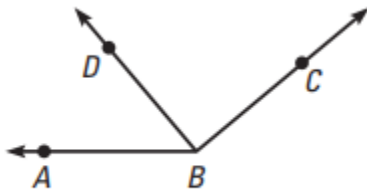
**Lesson 1.5 Worksheet**

**Name:** \_\_\_\_\_

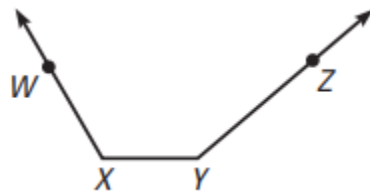
1.) In the space below, sketch an example of adjacent angles that are complementary. Are all complementary angles adjacent angles? *Explain.*

**In exercises 2-3, tell whether the indicated angles are adjacent. *Explain* why or why not.**

2.)  $\angle ABD$  and  $\angle DBC$

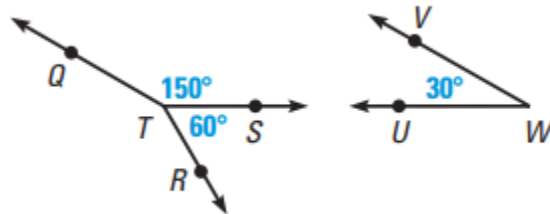


3.)  $\angle WXY$  and  $\angle XYZ$



4.) Name a pair of complementary angles and a pair of supplementary angles in the picture below.

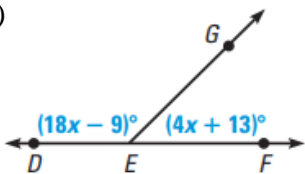
Complementary:



Supplementary:

**In exercises 5-6, find the measure of  $\angle DEG$  and  $\angle GEF$ .**

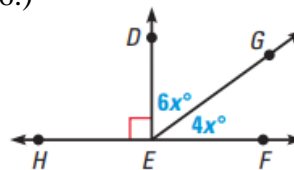
5.)



$m\angle DEG =$  \_\_\_\_\_

$m\angle GEF =$  \_\_\_\_\_

6.)



$m\angle DEG =$  \_\_\_\_\_

$m\angle GEF =$  \_\_\_\_\_

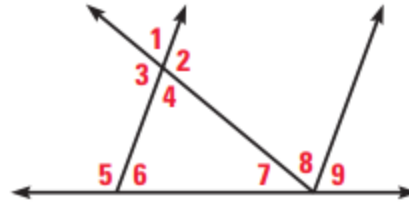
Use the diagram below to tell whether the angles are *vertical angles*, a *linear pair*, or *neither*.

6.)  $\angle 1$  and  $\angle 4$

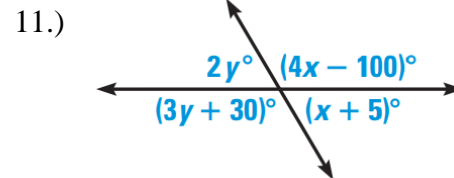
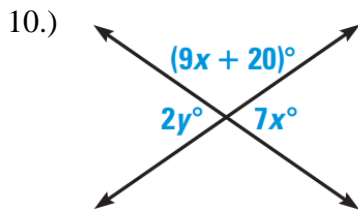
7.)  $\angle 3$  and  $\angle 7$

8.)  $\angle 5$  and  $\angle 6$

9.)  $\angle 9$  and  $\angle 7$



Find the values of  $x$  and  $y$ .



$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

$x =$  \_\_\_\_\_  $y =$  \_\_\_\_\_

State whether the following statements are always, sometimes, or never true. *Explain your reasoning.*

12.) An obtuse angle has a complement.

13.) The complement of an acute angle is an acute angle.

14.) A straight angle has a supplement.

15.) The supplement of an acute angle is an obtuse angle.

$\angle A$  and  $\angle B$  are complementary. Solve for  $x$ , then find  $m\angle A$  and  $m\angle B$ .

16.)  $m\angle A = (11x + 24)$   
 $m\angle B = (x + 18)$

$x =$  \_\_\_\_\_  $m\angle A =$  \_\_\_\_\_  $m\angle B =$  \_\_\_\_\_

$\angle A$  and  $\angle B$  are supplementary. Solve for  $x$ , then find  $m\angle A$  and  $m\angle B$ .

17.)  $m\angle A = (2x - 20)$   
 $m\angle B = (3x + 5)$

$x =$  \_\_\_\_\_  $m\angle A =$  \_\_\_\_\_  $m\angle B =$  \_\_\_\_\_