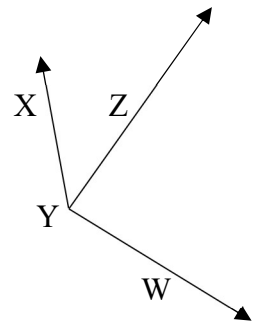


1.6 Homework

Write your answers on notebook paper, not this sheet.

- Use a protractor to draw accurate angles using these measurements. Label each angle and indicate whether it is *acute*, *right*, *obtuse*, or *straight*.
 - $\angle ABC$, 75°
 - $\angle DEF$, 122°
 - $\angle GHI$, 180°
 - $\angle JKL$, 43°

- Draw a pair of vertical angles. Label the vertical angles *1* and *2*.
- Vertical angles are congruent. What does *congruent* mean?
- Draw a pair of adjacent angles. Label the adjacent angles *3* and *4*.
- Angle B is 31° . Find the measurement of its:
 - complement.
 - supplement.



- $m\angle XYZ = 52^\circ$ and $m\angle WYZ = 114^\circ$. Find the measurement of $\angle XYW$.
- $\angle RST$ and $\angle TSU$ form a linear pair. If $m\angle RST = 78^\circ$, what is $m\angle TSU$.
- $\angle BAT$ and $\angle CAT$ are complementary. $m\angle BAT = 2x + 5$ and $m\angle CAT = 3x + 10$.
 - Write an equation using the Angle Addition Postulate.
 - Solve for x . Show all the work.
 - Calculate the measurement of $\angle BAT$ and $\angle CAT$.
- $\angle MOP$ and $\angle TOP$ are supplementary. $m\angle MOP = 7x$ and $\angle TOP = 8x$.
 - Write an equation using the Angle Addition Postulate.
 - Solve for x . Show all the work.
 - Calculate $m\angle MOP$ and $m\angle TOP$.