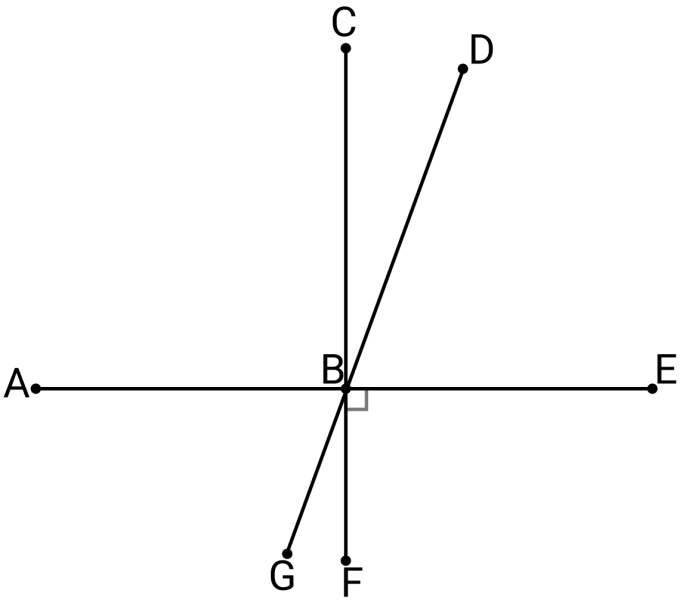
Name: _____ Date: _____

Three lines intersect at point B in the diagram below. Use the diagram to answer the questions that follow.



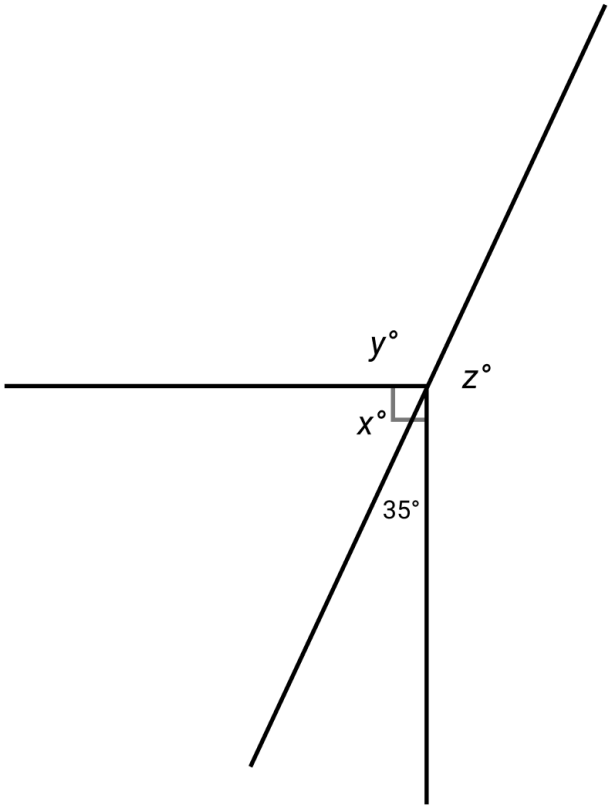
a. Name 2 pairs of complementary angles.

b. Name 2 pairs of supplementary angles.

c. Name 2 pairs of non-adjacent angles.

d. Name a pair of adjacent angles that are neither supplementary nor complementary.

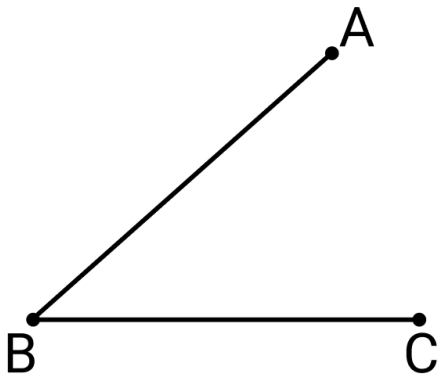
In the diagram below, a right angle intersects a straight line. Find the measures of angles x, y, and z.



In the table below, an angle measure is given. In each column, provide an angle measure that is either complementary or supplementary to the given angle.

Given Angle Measure	Complementary Angle Measure	Supplementary Angle Measure
35°		
60°		
20°		
88°		

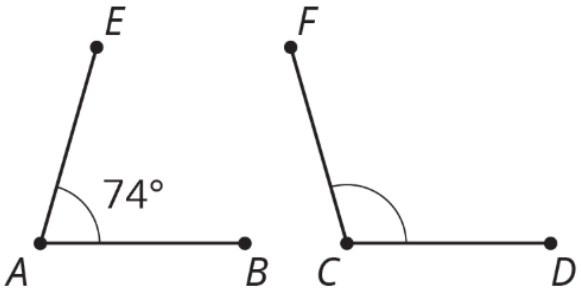
Angle *ABC* is shown below.



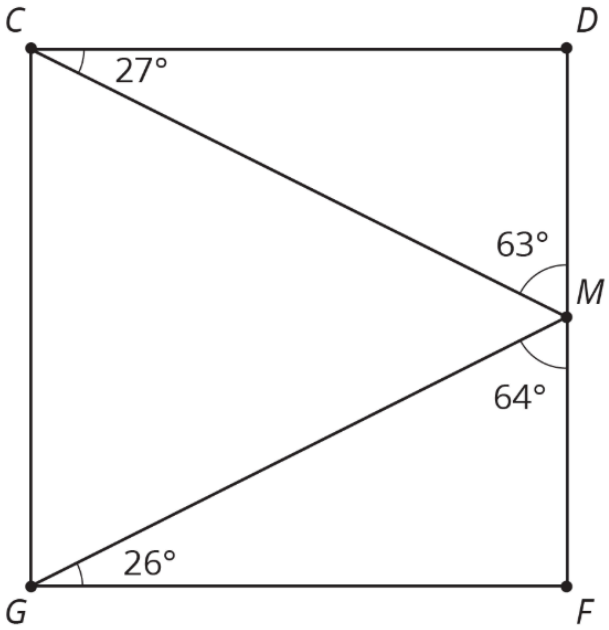
a. Draw line segment BD such that angles ABC and DBC are complementary.

b. Draw line segment EB such that angles ABC and EBC are supplementary.

Angles *A* and *C* are supplementary. Find the measure of angle *C*.



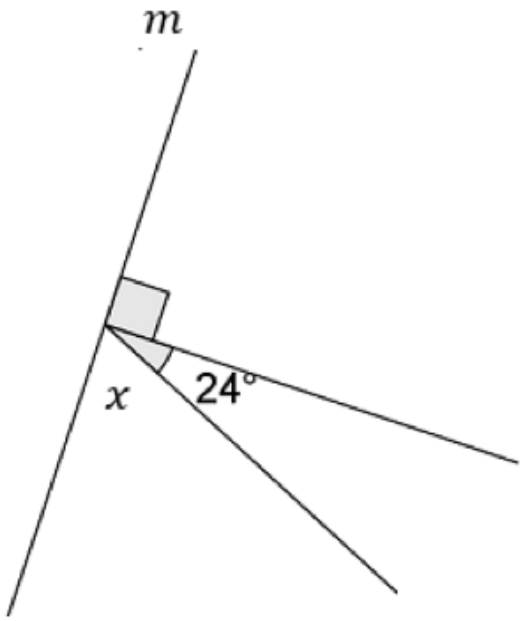
Use the figure below to answer the following questions.



a. List two pairs of angles in square CDFG that are complementary.

b. Name three angles that sum to 180°.

Line *m* in the diagram below is intersected by two rays that extend from the same point.



Charlie is trying to find the value of x and writes the equation $x + 24 = 180$ to help him find the value. Do you agree with Charlie's equation? Explain your reasoning. Then find the value of x.

Sources

5. Open Up Resources *Grade 7 Unit 7 Lesson 2* — Practice Problem 1
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