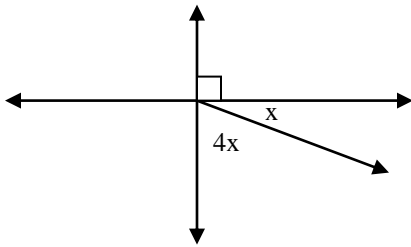


NAME \_\_\_\_\_ DATE \_\_\_\_\_  
GEOMETRY

### Complementary and Supplementary Angles

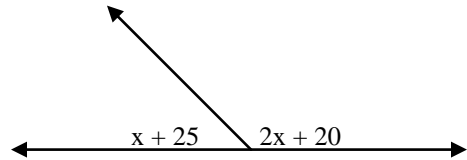
Show all work on loose leaf.

1.



Find the value of  $x$ .

2.



Find both angles.

- Find the supplement of an angle that measures  $(5x + 20)^\circ$ .
- An angle measures  $(3x - 37)^\circ$ . What is the measure of its complement?
- Two angles are supplementary. One angle is  $30^\circ$  more than another angle. Find both angles.
- Two angles are complementary. One angle is 6 less than double another angle. Find the larger angle.
- Two angles are supplementary. One angle is 32 less than 3 times another angle. Find both angles.
- The measure of two complementary angles are in the ratio 6:9. Find the measure of the smaller angle.
- Lines AB and CD intersect at E. If  $m\angle AEC = 6x - 27$  and  $m\angle BEC = 8x + 11$ , find the measure of angle BEC.
- The degree measure of the larger of two supplementary angles exceeds three times the smaller angle by 40. Find the measure of each angle.