

Name: _____

Supplementary and Complementary Angles

A) Answer each question and justify

1) Find the supplement for an angle equal to 115°

2) Find the complement for an angle equal to 59°

3) Find the complement for an angle equal to 89°

4) Find the supplement for an angle equal to 89°

5) Which represents the supplement of an angle measuring $5x$?

6) If two angles are complementary angles and they measure $(x + 15)^\circ$ and $(3x - 5)^\circ$. Find the measure for each angle.

- 7) If two angles are supplementary and their measures are $(2y - 12)^\circ$ and $(5y + 17)^\circ$. Find the measure of each angle.
- 8) If two angles are supplementary and are in the ratio of 5:4, find the measure of the larger angle.
- 9) If two angles are complementary and are in a 2:3 ratio. What are their measures?
- 10) Two supplementary angles are in ratio 3:5. How much does each measure?
- 11) The measure of the supplement of an angle is 60 less than 3 times the measure of the complement of the angle. Find the measure of the complement.

B) Write a two-column proof for each of the following:

12) Given: $\angle 1$ and $\angle 2$ form a linear pair

Prove: $\angle 1$ and $\angle 2$ are supplementary

