Notes Angle Relationships with Word Problems

Name: _____ Date: _____ Period: _____

Learning Target: _____

_____

Example 1: An angle is 40 degrees less than its complement. What's the angle? What's its complement?

Example 2: An angle is 60 degrees more than its supplement. What's the angle? What's its supplement?

Example 3: The supplement of an angle is 45 degrees less than twice the angle. What's the angle? What's its supplement?

Example 4: An angle is 30 degrees more than twice its supplement. What's the angle? What's its supplement?

Example 5: An angle is twelve more than three times its complement. What's the angle? What's its complement?

Example 6: The supplement of an angle is twenty-two more than three times its complement. What's the angle? What's its supplement?

Show me you can do it!

1. An angle is 28 degrees less than its complement. What's the angle? What's its complement?

2. An angle is 72 degrees more than its supplement. What's the angle? What's its supplement?

3. The supplement of an angle is 12 degrees less than three times the angle. What's the angle? What's its supplement?

4. The supplement of an angle is fifty-one degrees more than twice its complement. What's the angle? What's its supplement?

5. The complement of an angle is nine less than twice the angle. What's the angle? What's its complement?

6. The supplement of an angle is forty-two more than three times its complement. What's the angle? What's its supplement?

Show me you know it!

1. If two angles are complementary, what is their total? _____

2. If two angles are supplementary, what is their total? _____

3. Can you think of a situation where an angle wouldn't have a complement?

4. What is the complement of the complement of a 47° angle? Explain.

5. Is it possible for the complement and supplement of an angle to be the same?

6. Explain how you would set up and equation for the following problem. What are the key words?
   An angle is 45 degrees more than twice its supplement