

Worksheet Complementary And Supplementary Angles

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Part 1: Building a Foundation

What is the sum of two complementary angles?

Hint: Think about the definition of complementary angles.

- A) 45 degrees
- B) 90 degrees
- C) 180 degrees
- D) 360 degrees

What is the sum of two supplementary angles?

Hint: Consider the definition of supplementary angles.

- A) 45 degrees
- B) 90 degrees
- C) 180 degrees
- D) 360 degrees

Which of the following statements are true about complementary angles? (Select all that apply)

Hint: Think about the properties of complementary angles.

- A) They always add up to 180 degrees.
- B) They can be adjacent.
- C) They always form a linear pair.
- D) They add up to 90 degrees.

Explain in your own words what it means for two angles to be supplementary.

Hint: Consider the definition and properties of supplementary angles.

Provide the complement and supplement of a 30-degree angle.

Hint: Use the definitions of complement and supplement.

1. Complement of 30 degrees

2. Supplement of 30 degrees

Part 2: Understanding and Application

If angle A is 60 degrees, what is the measure of its complement?

Hint: Remember that complementary angles add up to 90 degrees.

- A) 30 degrees
- B) 60 degrees
- C) 120 degrees
- D) 90 degrees

Which of the following pairs of angles are supplementary? (Select all that apply)

Hint: Consider the definition of supplementary angles.

- A) 90 degrees and 90 degrees
- B) 45 degrees and 135 degrees
- C) 60 degrees and 120 degrees
- D) 100 degrees and 80 degrees

Describe a real-world scenario where you might encounter complementary angles.

Hint: Think about everyday objects or situations.

You have a right triangle with one angle measuring 40 degrees. What is the measure of the other non-right angle?

Hint: Remember that the angles in a triangle add up to 180 degrees.

- A) 40 degrees
- B) 50 degrees
- C) 60 degrees
- D) 90 degrees

Given an angle of 75 degrees, calculate both its complement and supplement.

Hint: Use the definitions of complement and supplement.

Part 3: Analysis, Evaluation, and Creation

If two angles are both supplements and complements of each other, what are their measures?

Hint: Consider the definitions of supplementary and complementary angles.

- A) 45 degrees each
- B) 90 degrees each
- C) 180 degrees each
- D) 0 degrees each

Which of the following statements correctly describe the relationship between complementary and supplementary angles? (Select all that apply)

Hint: Think about the definitions and properties of both types of angles.

- A) All complementary angles are also supplementary.
- B) All supplementary angles are also complementary.
- C) Complementary angles add up to less than supplementary angles.
- D) Supplementary angles can form a straight line.

Analyze the relationship between complementary and supplementary angles in the context of a geometric figure, such as a triangle or quadrilateral.

Hint: Consider how angles interact in different shapes.

Which of the following scenarios correctly uses the concept of supplementary angles?

Hint: Think about practical applications of supplementary angles.

- A) Designing a corner shelf
- B) Calculating the height of a building using a shadow
- C) Creating a 180-degree turn in a road
- D) Building a triangular roof

Create a real-world problem involving complementary and supplementary angles, and provide a solution to your problem.

Hint: Think about everyday situations where angles are relevant.

