

Worksheet Complementary And Supplementary Angles Answer Key PDF

Worksheet Complementary And Supplementary Angles Answer Key PDF

Disclaimer: The worksheet complementary and supplementary angles answer key pdf was generated with the help of StudyBlaze AI. Please be aware that AI can make mistakes. Please consult your teacher if you're unsure about your solution or think there might have been a mistake. Or reach out directly to the StudyBlaze team at max@studyblaze.io.

Part 1: Building a Foundation

What is the sum of two complementary angles?

undefined. A) 45 degrees

undefined. B) 90 degrees ✓

undefined. C) 180 degrees

undefined. D) 360 degrees

The sum of two complementary angles is always 90 degrees.

What is the sum of two supplementary angles?

undefined. A) 45 degrees

undefined. B) 90 degrees

undefined. C) 180 degrees ✓

undefined. D) 360 degrees

The sum of two supplementary angles is always 180 degrees.

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

undefined. A) They always add up to 180 degrees.

undefined. B) They can be adjacent. ✓

undefined. C) They always form a linear pair.

undefined. D) They add up to 90 degrees. ✓

Complementary angles add up to 90 degrees and can be adjacent.

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

Two angles are supplementary if their measures add up to 180 degrees.

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

1. Complement of 30 degrees

60 degrees

2. Supplement of 30 degrees

150 degrees

The complement of a 30-degree angle is 60 degrees, and the supplement is 150 degrees.

Part 2: Understanding and Application

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

undefined. A) 30 degrees ✓

undefined. B) 60 degrees

undefined. C) 120 degrees

undefined. D) 90 degrees

The complement of angle A is 30 degrees.

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

undefined. A) 90 degrees and 90 degrees

undefined. B) 45 degrees and 135 degrees ✓

undefined. C) 60 degrees and 120 degrees ✓

undefined. D) 100 degrees and 80 degrees ✓

Pairs that add up to 180 degrees are supplementary.

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

Complementary angles can be found in various real-world contexts, such as in the design of furniture or architecture.

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

undefined. A) 40 degrees

undefined. B) 50 degrees ✓

undefined. C) 60 degrees

undefined. D) 90 degrees

The other non-right angle measures 50 degrees.

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

The complement of 75 degrees is 15 degrees, and the supplement is 105 degrees.

Part 3: Analysis, Evaluation, and Creation

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

undefined. A) 45 degrees each

undefined. B) 90 degrees each ✓

undefined. C) 180 degrees each

undefined. D) 0 degrees each

The only angles that are both supplements and complements of each other are 90 degrees each.

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

undefined. A) All complementary angles are also supplementary.

undefined. B) All supplementary angles are also complementary.

undefined. C) Complementary angles add up to less than supplementary angles. ✓

undefined. D) Supplementary angles can form a straight line. ✓

Complementary angles add up to 90 degrees, while supplementary angles add up to 180 degrees.

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

In a triangle, the sum of angles is 180 degrees, while in a quadrilateral, the sum is 360 degrees, illustrating the relationship between complementary and supplementary angles.

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

undefined. A) Designing a corner shelf

undefined. B) Calculating the height of a building using a shadow

undefined. C) Creating a 180-degree turn in a road ✓

undefined. D) Building a triangular roof

Creating a 180-degree turn in a road is a correct use of supplementary angles.

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

An example could be designing a ramp where the angle of elevation is 30 degrees; the complementary angle would be 60 degrees, and the supplementary angle would be 150 degrees.