Ancient Angles: A Journey Through History with Geometric Adventures

Math Grade 4 History Theme

🏛 **Help famous historical figures solve their angle challenges by using your math skills to complete their quests!**

NAME _____

DATE _____

SCORE _____ / 8

1

Cleopatra is designing a new pyramid chamber in Egypt and needs to cut two wooden beams. One beam makes a 35° angle with the ground, and another makes a 55° angle with the ground. If these beams meet at a point, what is the total angle they form together?

2

King Arthur is planning a round table tournament. He wants to divide the seating area into sections using four equal angles. If the full circle is 360°, what is the measure of each section that Arthur must create?

3

Marco Polo is navigating through the Silk Road and needs to turn his caravan. He turns 25° to avoid a mountain, then turns another 65° to head toward the trading post. What is the total angle he has turned?

4

Queen Elizabeth I is designing the gardens at Hampton Court Palace. Two garden paths meet at a corner forming a right angle. One path makes a 40° angle with a stone wall. What angle does the other path make with the same wall?

5

Viking explorer Leif Erikson is sailing to discover new lands. His ship's sail makes a 120° angle with the ship's mast. What is the angle on the other side of the mast if they form a straight line together?

6

Benjamin Franklin is flying his kite in a lightning storm. The kite string makes a 30° angle with the ground. If he moves the kite so it makes a 75° angle with the ground instead, how many degrees did the angle increase?

7

Joan of Arc is planning her army's strategic formations. Three soldiers stand at angles around a central point: one at 100°, one at 120°, and one at the remaining angle. What angle does the third soldier occupy?

8

George Washington is surveying land for the new capital city. Two property lines create perpendicular angles (90° each). If one line turns an additional 35° from the perpendicular, what angle now exists between that adjusted line and the original line?

Answer Key

1

Cleopatra is designing a new pyramid chamber in Egypt and needs to cut two wooden beams. One beam makes a 35° angle with the ground, and another makes a 55° angle with the ground. If these beams meet at a point, what is the total angle they form together?

ANSWER

90°

2

King Arthur is planning a round table tournament. He wants to divide the seating area into sections using four equal angles. If the full circle is 360°, what is the measure of each section that Arthur must create?

ANSWER

90°

3

Marco Polo is navigating through the Silk Road and needs to turn his caravan. He turns 25° to avoid a mountain, then turns another 65° to head toward the trading post. What is the total angle he has turned?

ANSWER

90°

4

Queen Elizabeth I is designing the gardens at Hampton Court Palace. Two garden paths meet at a corner forming a right angle. One path makes a 40° angle with a stone wall. What angle does the other path make with the same wall?

ANSWER

50°

5

Viking explorer Leif Erikson is sailing to discover new lands. His ship's sail makes a 120° angle with the ship's mast. What is the angle on the other side of the mast if they form a straight line together?

ANSWER

60°

6

Benjamin Franklin is flying his kite in a lightning storm. The kite string makes a 30° angle with the ground. If he moves the kite so it makes a 75° angle with the ground instead, how many degrees did the angle increase?

ANSWER

45°

7

Joan of Arc is planning her army's strategic formations. Three soldiers stand at angles around a central point: one at 100°, one at 120°, and one at the remaining angle. What angle does the third soldier occupy?

ANSWER

140°

8

George Washington is surveying land for the new capital city. Two property lines create perpendicular angles (90° each). If one line turns an additional 35° from the perpendicular, what angle now exists between that adjusted line and the original line?

ANSWER

55°