Holiday Heroes and Their Angle Adventures

Math   **Grade 4**   **Holidays Theme**

🎄 **Help Santa, the Easter Bunny, and other holiday characters solve angle mysteries on their festive quests!**

NAME
_____

DATE
_____

SCORE
_____ / 8

1

Santa is decorating his workshop with two candy canes. He crosses them to make an X shape. One candy cane makes a 45-degree angle with the floor. What is the angle of the candy cane on the other side of the X?

2

The Easter Bunny is arranging three decorated eggs in a circle to create a game for children. The first egg is at the top, the second egg is 90 degrees clockwise from it, and the third egg is 90 degrees clockwise from the second. What is the total angle traveled going from the first egg to the third egg clockwise?

3

Cupid is aiming his arrow at a Valentine's Day heart. He points his arrow straight ahead (0 degrees). Then he rotates it 30 degrees to the left. How many more degrees does he need to rotate it to reach 90 degrees total?

4

The Halloween pumpkin patch has two walking paths that meet at a corner. The paths form a right angle. One path is 90 degrees from north. What angle does the other path make from north if it forms a right angle with the first path?

5

A Thanksgiving turkey is standing in the middle of the barn. It turns to face the sunrise at 0 degrees, then turns 45 degrees clockwise to look at the farmer. Then it turns another 45 degrees clockwise. How many total degrees has the turkey turned from its starting position?

6

The Christmas tree at the town square has lights arranged in four directions: north, south, east, and west. The angle between north and east is how many degrees?

7

Rudolph the reindeer is flying in a straight line toward a star. Then he changes direction and makes a 120-degree turn. If he continues and makes another 120-degree turn, what is the total angle he has turned?

8

The Birthday Party character is blowing out candles arranged in a semi-circle on a cake. A semi-circle measures 180 degrees. If the Birthday character blows out candles that are spaced at 30-degree intervals, how many candles can fit along the semi-circle?

Answer Key

1

Santa is decorating his workshop with two candy canes. He crosses them to make an X shape. One candy cane makes a 45-degree angle with the floor. What is the angle of the candy cane on the other side of the X?

ANSWER

45 degrees

2

The Easter Bunny is arranging three decorated eggs in a circle to create a game for children. The first egg is at the top, the second egg is 90 degrees clockwise from it, and the third egg is 90 degrees clockwise from the second. What is the total angle traveled going from the first egg to the third egg clockwise?

ANSWER

180 degrees

3

Cupid is aiming his arrow at a Valentine's Day heart. He points his arrow straight ahead (0 degrees). Then he rotates it 30 degrees to the left. How many more degrees does he need to rotate it to reach 90 degrees total?

ANSWER

60 degrees

4

The Halloween pumpkin patch has two walking paths that meet at a corner. The paths form a right angle. One path is 90 degrees from north. What angle does the other path make from north if it forms a right angle with the first path?

ANSWER

0 degrees or 180 degrees

5

A Thanksgiving turkey is standing in the middle of the barn. It turns to face the sunrise at 0 degrees, then turns 45 degrees clockwise to look at the farmer. Then it turns another 45 degrees clockwise. How many total degrees has the turkey turned from its starting position?

ANSWER

90 degrees

6

The Christmas tree at the town square has lights arranged in four directions: north, south, east, and west. The angle between north and east is how many degrees?

ANSWER

90 degrees

7

Rudolph the reindeer is flying in a straight line toward a star. Then he changes direction and makes a 120-degree turn. If he continues and makes another 120-degree turn, what is the total angle he has turned?

ANSWER

240 degrees

8

The Birthday Party character is blowing out candles arranged in a semi-circle on a cake. A semi-circle measures 180 degrees. If the Birthday character blows out candles that are spaced at 30-degree intervals, how many candles can fit along the semi-circle?

ANSWER

6 candles