

# Dragons of Berk: The Angle Adventure Quest

Math

Grade 4

Dragons Theme

Help Hiccup and his dragon friends solve angle mysteries across the island of Berk!

NAME \_\_\_\_\_

DATE \_\_\_\_\_

SCORE \_\_\_\_\_

/ 8

1

Hiccup is training Toothless to fly through a canyon. Toothless needs to turn his wings to make a sharp turn. His left wing makes a 35-degree angle with his body, and his right wing makes a 40-degree angle with his body. What is the total angle between both of Toothless's wings?

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2

Astrid is designing a new obstacle course for the young dragons. She creates two ramps that meet at a point. One ramp goes up at a 50-degree angle from the ground, and another ramp goes up at a 40-degree angle. If these two ramps form a straight line when extended, what angle do they make together?

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3

Stormfly the Deadly Nadder is diving down from the sky to catch fish. She starts her dive at a 90-degree angle (straight down) and then adjusts her angle by turning 35 degrees to the left to avoid a cliff. What is her new diving angle from straight down?

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4

Snotlout's Hookfang is practicing aerial tricks. First, Hookfang flies in one direction, then turns and flies at a 120-degree angle from his starting direction. Then Hookfang turns again at an 80-degree angle from his second direction. If Hookfang keeps flying in a pattern, what is the total of all his turns?

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5

Fishlegs discovers an ancient dragon map showing three treasure locations. The angle from the Great Hall to the first treasure is 60 degrees north. The angle from the Great Hall to the second treasure is 25 degrees north. What is the difference between these two angles to find the angle between the two treasures?

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6

Meatlug the Gronckle is arranging stones in a pattern on Berk's beach to mark a landing zone. She places stones that form three angles: one angle of 45 degrees, one angle of 65 degrees, and one angle of 70 degrees. What is the sum of all three angles?

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7

Night Fury dragons can turn their heads in amazing ways! Toothless turns his head 110 degrees to the left to look at Hiccup, then turns 70 degrees more to the right to look at a fish. What is the total angle from where he started looking to where he ends up looking?

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8

The Dragon Riders are planning their flight formation. Hiccup and Toothless fly at a 0-degree angle (straight ahead). Astrid and Stormfly fly at a 45-degree angle to the right. Snotlout and Hookfang fly at a 45-degree angle to the left. What angle do Astrid's and Snotlout's flight paths make together?

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# Answer Key

Math

Grade 4

For Parents and Teachers

1

Hiccup is training Toothless to fly through a canyon. Toothless needs to turn his wings to make a sharp turn. His left wing makes a 35-degree angle with his body, and his right wing makes a 40-degree angle with his body. What is the total angle between both of Toothless's wings?

ANSWER

75 degrees

2

Astrid is designing a new obstacle course for the young dragons. She creates two ramps that meet at a point. One ramp goes up at a 50-degree angle from the ground, and another ramp goes up at a 40-degree angle. If these two ramps form a straight line when extended, what angle do they make together?

ANSWER

90 degrees

3

Stormfly the Deadly Nadder is diving down from the sky to catch fish. She starts her dive at a 90-degree angle (straight down) and then adjusts her angle by turning 35 degrees to the left to avoid a cliff. What is her new diving angle from straight down?

ANSWER

55 degrees

4

Snotlout's Hookfang is practicing aerial tricks. First, Hookfang flies in one direction, then turns and flies at a 120-degree angle from his starting direction. Then Hookfang turns again at an 80-degree angle from his second direction. If Hookfang keeps flying in a pattern, what is the total of all his turns?

ANSWER

200 degrees

5

Fishlegs discovers an ancient dragon map showing three treasure locations. The angle from the Great Hall to the first treasure is 60 degrees north. The angle from the Great Hall to the second treasure is 25 degrees north. What is the difference between these two angles to find the angle between the two treasures?

ANSWER

35 degrees

6

Meatlug the Gronckle is arranging stones in a pattern on Berk's beach to mark a landing zone. She places stones that form three angles: one angle of 45 degrees, one angle of 65 degrees, and one angle of 70 degrees. What is the sum of all three angles?

ANSWER

180 degrees

7

Night Fury dragons can turn their heads in amazing ways! Toothless turns his head 110 degrees to the left to look at Hiccup, then turns 70 degrees more to the right to look at a fish. What is the total angle from where he started looking to where he ends up looking?

ANSWER

40 degrees

8

The Dragon Riders are planning their flight formation. Hiccup and Toothless fly at a 0-degree angle (straight ahead). Astrid and Stormfly fly at a 45-degree angle to the right. Snotlout and Hookfang fly at a 45-degree angle to the left. What angle do Astrid's and Snotlout's flight paths make together?

ANSWER

90 degrees