# Solutions – Sine Rule (A)

In triangle ABC, side BC = 11.1 cm and side AC = 20.8 cm. ∠ABC = 98°. Find ∠BAC to one decimal place.

32°

In triangle ABC, ∠ABC = 78° and ∠ACB = 51°. Side AB = 12.4 cm. Find side AC to one decimal place.

15.7 cm

In triangle ABC, ∠ABC = 42° and ∠BAC = 75°. Side AC = 8.0 cm. Find side BC to one decimal place.

11.6 cm

In triangle ABC, side AB = 11.0 cm and side BC = 9.3 cm. ∠ABC = 62°. Find ∠ACB to one decimal place.

67°

In triangle ABC, side AC = 9.7 cm and side AB = 10.6 cm. ∠BAC = 64°. Find ∠ABC to one decimal place.

54°

# Solutions – Sine Rule (B)

In triangle ABC, side AB = 12.3 cm and side BC = 20.0 cm. ∠ABC = 56°. Find ∠ACB to one decimal place.
38°

In triangle ABC, side AB = 8.6 cm and side BC = 8.6 cm. ∠ABC = 62°. Find ∠ACB to one decimal place.
59°

In triangle ABC, ∠ABC = 40° and ∠BAC = 46°. Side AC = 12.2 cm. Find side BC to one decimal place.
13.7 cm

In triangle ABC, ∠ABC = 89° and ∠ACB = 16°. Side AB = 8.0 cm. Find side AC to one decimal place.
29.0 cm

In triangle ABC, ∠BAC = 77° and ∠ACB = 59°. Side BC = 9.7 cm. Find side AB to one decimal place.
8.6 cm

# Solutions – Sine Rule (C)

In triangle ABC, side AB = 12.0 cm and side BC = 19.9 cm. ∠ABC = 58°. Find ∠ACB to one decimal place.
37°

In triangle ABC, ∠BAC = 55° and ∠ACB = 38°. Side BC = 21.3 cm. Find side AB to one decimal place.
16.0 cm

In triangle ABC, ∠ABC = 36° and ∠BAC = 76°. Side AC = 17.0 cm. Find side BC to one decimal place.
28.1 cm

In triangle ABC, ∠ABC = 51° and ∠ACB = 48°. Side AB = 20.8 cm. Find side AC to one decimal place.
21.8 cm

In triangle ABC, side AB = 4.5 cm and side BC = 26.0 cm. ∠ABC = 80°. Find ∠ACB to one decimal place.
10°

# Solutions – Sine Rule (D)

In triangle ABC, ∠ABC = 77° and ∠BAC = 65°. Side AC = 9.7 cm. Find side BC to one decimal place.

9.1 cm

In triangle ABC, side AB = 23.9 cm and side BC = 13.1 cm. ∠ABC = 61°. Find ∠ACB to one decimal place.

86°

In triangle ABC, ∠BAC = 67° and ∠ACB = 68°. Side BC = 10.1 cm. Find side AB to one decimal place.

10.2 cm

In triangle ABC, ∠ABC = 50° and ∠BAC = 97°. Side AC = 13.0 cm. Find side BC to one decimal place.

16.9 cm

In triangle ABC, side AC = 18.2 cm and side AB = 3.3 cm. ∠BAC = 97°. Find ∠ABC to one decimal place.

73°

# Solutions – Sine Rule (E)

In triangle ABC, ∠ABC = 40° and ∠ACB = 72°. Side AB = 25.7 cm. Find side AC to one decimal place.

17.4 cm

In triangle ABC, ∠ABC = 35° and ∠ACB = 72°. Side AB = 15.2 cm. Find side AC to one decimal place.

9.2 cm

In triangle ABC, side AC = 19.0 cm and side AB = 4.3 cm. ∠BAC = 78°. Find ∠ABC to one decimal place.

89°

In triangle ABC, side AC = 15.9 cm and side AB = 13.7 cm. ∠BAC = 38°. Find ∠ABC to one decimal place.

83°

In triangle ABC, ∠ABC = 54° and ∠BAC = 43°. Side AC = 21.8 cm. Find side BC to one decimal place.

18.4 cm

# Solutions – Sine Rule (F)

In triangle ABC, side AB = 24.7 cm and side BC = 23.1 cm. ∠ABC = 55°. Find ∠ACB to one decimal place.
66°

In triangle ABC, side BC = 24.7 cm and side AC = 25.7 cm. ∠ABC = 72°. Find ∠BAC to one decimal place.
66°

In triangle ABC, ∠ABC = 84° and ∠ACB = 30°. Side AB = 7.5 cm. Find side AC to one decimal place.
14.9 cm

In triangle ABC, side AB = 6.0 cm and side BC = 28.3 cm. ∠ABC = 91°. Find ∠ACB to one decimal place.
12°

In triangle ABC, ∠ABC = 99° and ∠BAC = 46°. Side AC = 24.7 cm. Find side BC to one decimal place.
18.0 cm

# Solutions – Sine Rule (G)

In triangle ABC, ∠BAC = 65° and ∠ACB = 38°. Side BC = 10.9 cm. Find side AB to one decimal place.

7.4 cm

In triangle ABC, side AC = 21.3 cm and side AB = 3.8 cm. ∠BAC = 94°. Find ∠ABC to one decimal place.

76°

In triangle ABC, side BC = 26.1 cm and side AC = 27.6 cm. ∠ABC = 80°. Find ∠BAC to one decimal place.

69°

In triangle ABC, side BC = 16.0 cm and side AC = 10.3 cm. ∠ABC = 31°. Find ∠BAC to one decimal place.

53°

In triangle ABC, ∠BAC = 75° and ∠ACB = 74°. Side BC = 24.1 cm. Find side AB to one decimal place.

24.0 cm

# Solutions – Sine Rule (H)

In triangle ABC, side AB = 10.4 cm and side BC = 15.0 cm. ∠ABC = 43°. Find ∠ACB to one decimal place.

44°

In triangle ABC, ∠ABC = 65° and ∠BAC = 45°. Side AC = 26.3 cm. Find side BC to one decimal place.

20.5 cm

In triangle ABC, side AC = 9.9 cm and side AB = 6.4 cm. ∠BAC = 56°. Find ∠ABC to one decimal place.

84°

In triangle ABC, ∠ABC = 62° and ∠ACB = 86°. Side AB = 14.0 cm. Find side AC to one decimal place.

12.4 cm

In triangle ABC, side AC = 15.8 cm and side AB = 2.8 cm. ∠BAC = 88°. Find ∠ABC to one decimal place.

82°

# Solutions – Sine Rule (I)

In triangle ABC, ∠ABC = 70° and ∠BAC = 100°. Side AC = 9.4 cm. Find side BC to one decimal place.

9.8 cm

In triangle ABC, side AC = 20.5 cm and side AB = 26.3 cm. ∠BAC = 70°. Find ∠ABC to one decimal place.

45°

In triangle ABC, ∠BAC = 99° and ∠ACB = 27°. Side BC = 12.8 cm. Find side AB to one decimal place.

5.9 cm

In triangle ABC, ∠ABC = 81° and ∠ACB = 10°. Side AB = 5.2 cm. Find side AC to one decimal place.

29.6 cm

In triangle ABC, side BC = 12.6 cm and side AC = 12.0 cm. ∠ABC = 67°. Find ∠BAC to one decimal place.

75°

# Solutions – Sine Rule (J)

In triangle ABC, ∠ABC = 84° and ∠BAC = 64°. Side AC = 25.9 cm. Find side BC to one decimal place.

23.4 cm

In triangle ABC, ∠ABC = 45° and ∠ACB = 57°. Side AB = 10.9 cm. Find side AC to one decimal place.

9.2 cm

In triangle ABC, side AC = 28.9 cm and side AB = 5.0 cm. ∠BAC = 75°. Find ∠ABC to one decimal place.

95°

In triangle ABC, side AC = 8.9 cm and side AB = 11.0 cm. ∠BAC = 39°. Find ∠ABC to one decimal place.

54°

In triangle ABC, ∠BAC = 73° and ∠ACB = 15°. Side BC = 13.4 cm. Find side AB to one decimal place.

3.6 cm