Solutions – Cosine Rule (A)

In triangle ABC, side AB = 22 cm and side BC = 18 cm. ∠ABC = 62.4°. Find side AC to one decimal place.

21.0 cm

In triangle ABC, side AC = 9 cm and side BC = 20 cm. ∠ACB = 15.3°. Find side AB to one decimal place.

11.6 cm

In triangle ABC, side AC = 19 cm and side AB = 8 cm. Side BC = 15 cm. Find ∠BAC to one decimal place.

48.9°

In triangle ABC, side AB = 5 cm and side BC = 10 cm. Side AC = 9 cm. Find ∠ABC to one decimal place.

63.9°

In triangle ABC, side AC = 14 cm and side BC = 22 cm. ∠ACB = 39.0°. Find side AB to one decimal place.

14.2 cm

Solutions – Cosine Rule (B)

In triangle ABC, side AC = 14 cm and side AB = 10 cm. Side BC = 7 cm. Find ∠BAC to one decimal place.

28.1°

In triangle ABC, side AC = 9 cm and side AB = 23 cm. Side BC = 15 cm. Find ∠BAC to one decimal place.

21.6°

In triangle ABC, side AC = 17 cm and side BC = 15 cm. ∠ACB = 94.1°. Find side AB to one decimal place.

23.5 cm

In triangle ABC, side AC = 17 cm and side AB = 18 cm. ∠BAC = 36.5°. Find side BC to one decimal place.

11.0 cm

In triangle ABC, side AC = 22 cm and side BC = 19 cm. Side AB = 20 cm. Find ∠ACB to one decimal place.

57.8°

Solutions – Cosine Rule (C)

In triangle ABC, side AB = 17 cm and side BC = 14 cm. ∠ABC = 48.4°. Find side AC to one decimal place.

13.0 cm

In triangle ABC, side AC = 11 cm and side BC = 10 cm. Side AB = 11 cm. Find ∠ACB to one decimal place.

63.0°

In triangle ABC, side AB = 20 cm and side BC = 21 cm. ∠ABC = 55.2°. Find side AC to one decimal place.

19.0 cm

In triangle ABC, side AB = 25 cm and side BC = 17 cm. Side AC = 18 cm. Find ∠ABC to one decimal place.

46.0°

In triangle ABC, side AC = 12 cm and side AB = 8 cm. Side BC = 17 cm. Find ∠BAC to one decimal place.

115.0°

Solutions – Cosine Rule (D)

In triangle ABC, side AC = 14 cm and side BC = 16 cm. Side AB = 15 cm. Find ∠ACB to one decimal place.

59.6°

In triangle ABC, side AC = 13 cm and side AB = 15 cm. ∠BAC = 41.1°. Find side BC to one decimal place.

10.0 cm

In triangle ABC, side AC = 6 cm and side AB = 10 cm. Side BC = 12 cm. Find ∠BAC to one decimal place.

93.8°

In triangle ABC, side AC = 10 cm and side AB = 14 cm. Side BC = 6 cm. Find ∠BAC to one decimal place.

21.8°

In triangle ABC, side AC = 9 cm and side AB = 16 cm. ∠BAC = 94.8°. Find side BC to one decimal place.

19.0 cm

Solutions – Cosine Rule (E)

In triangle ABC, side AC = 12 cm and side AB = 20 cm. ∠BAC = 22.3°. Find side BC to one decimal place.

10.0 cm

In triangle ABC, side AB = 20 cm and side BC = 7 cm. ∠ABC = 36.9°. Find side AC to one decimal place.

15.0 cm

In triangle ABC, side AC = 20 cm and side BC = 12 cm. Side AB = 10 cm. Find ∠ACB to one decimal place.

22.3°

In triangle ABC, side AC = 7 cm and side BC = 16 cm. Side AB = 18 cm. Find ∠ACB to one decimal place.

94.9°

In triangle ABC, side AC = 10 cm and side BC = 17 cm. Side AB = 25 cm. Find ∠ACB to one decimal place.

134.0°

Solutions – Cosine Rule (F)

In triangle ABC, side AC = 10 cm and side BC = 16 cm. ∠ACB = 17.6°. Find side AB to one decimal place.

7.1 cm

In triangle ABC, side AB = 15 cm and side BC = 11 cm. Side AC = 9 cm. Find ∠ABC to one decimal place.

36.6°

In triangle ABC, side AC = 17 cm and side AB = 17 cm. ∠BAC = 60.0°. Find side BC to one decimal place.

17.0 cm

In triangle ABC, side AC = 21 cm and side BC = 23 cm. Side AB = 19 cm. Find ∠ACB to one decimal place.

50.9°

In triangle ABC, side AC = 14 cm and side BC = 8 cm. ∠ACB = 48.2°. Find side AB to one decimal place.

10.5 cm

Solutions – Cosine Rule (G)

In triangle ABC, side AC = 23 cm and side BC = 16 cm. ∠ACB = 122.7°. Find side AB to one decimal place.

34.4 cm

In triangle ABC, side AB = 18 cm and side BC = 22 cm. ∠ABC = 65.9°. Find side AC to one decimal place.

22.0 cm

In triangle ABC, side AC = 15 cm and side BC = 20 cm. Side AB = 9 cm. Find ∠ACB to one decimal place.

25.0°

In triangle ABC, side AB = 20 cm and side BC = 13 cm. Side AC = 9 cm. Find ∠ABC to one decimal place.

20.2°

In triangle ABC, side AC = 7 cm and side BC = 14 cm. Side AB = 13 cm. Find ∠ACB to one decimal place.

67.2°

Solutions – Cosine Rule (H)

In triangle ABC, side AB = 19 cm and side BC = 25 cm. Side AC = 17 cm. Find ∠ABC to one decimal place.

42.8°

In triangle ABC, side AB = 21 cm and side BC = 6 cm. Side AC = 25 cm. Find ∠ABC to one decimal place.

126.0°

In triangle ABC, side AC = 13 cm and side BC = 19 cm. ∠ACB = 41.5°. Find side AB to one decimal place.

12.6 cm

In triangle ABC, side AC = 6 cm and side BC = 16 cm. ∠ACB = 21.6°. Find side AB to one decimal place.

10.7 cm

In triangle ABC, side AC = 19 cm and side BC = 21 cm. Side AB = 25 cm. Find ∠ACB to one decimal place.

77.2°

Solutions – Cosine Rule (I)

In triangle ABC, side AC = 23 cm and side AB = 17 cm. Side BC = 22 cm. Find ∠BAC to one decimal place.

64.7°

In triangle ABC, side AB = 6 cm and side BC = 19 cm. ∠ABC = 71.3°. Find side AC to one decimal place.

18.0 cm

In triangle ABC, side AC = 13 cm and side BC = 22 cm. Side AB = 21 cm. Find ∠ACB to one decimal place.

68.2°

In triangle ABC, side AB = 21 cm and side BC = 20 cm. Side AC = 20 cm. Find ∠ABC to one decimal place.

58.3°

In triangle ABC, side AC = 19 cm and side AB = 13 cm. ∠BAC = 34.1°. Find side BC to one decimal place.

11.0 cm

Solutions – Cosine Rule (J)

In triangle ABC, side AB = 21 cm and side BC = 15 cm. ∠ABC = 17.1°. Find side AC to one decimal place.

8.0 cm

In triangle ABC, side AC = 18 cm and side AB = 20 cm. Side BC = 23 cm. Find ∠BAC to one decimal place.

74.3°

In triangle ABC, side AC = 7 cm and side AB = 17 cm. ∠BAC = 44.8°. Find side BC to one decimal place.

13.0 cm

In triangle ABC, side AC = 15 cm and side BC = 18 cm. Side AB = 12 cm. Find ∠ACB to one decimal place.

41.4°

In triangle ABC, side AB = 16 cm and side BC = 18 cm. Side AC = 6 cm. Find ∠ABC to one decimal place.

19.2°