Law of Sines Sides and Angles (LAWSINESSIDEANGLE2)

Find each measurement indicated. Round your answers to the nearest tenth.

1) $m\angle B = 35°$, $m\angle C = 14°$, $b = 19$ mi
Find c

2) $m\angle A = 61°$, $m\angle C = 30°$, $b = 16$ yd
Find a

3) $m\angle B = 56°$, $m\angle C = 108°$, $b = 27$ in
Find c

4) $m\angle C = 86°$, $m\angle B = 30°$, $b = 15$ cm
Find c

5) $m\angle B = 12°$, $m\angle C = 10°$, $a = 56$ ft
Find c

6) $m\angle B = 54°$, $m\angle C = 78°$, $a = 22$ in
Find c

7) $m\angle B = 32°$, $m\angle C = 88°$, $a = 13$ cm
Find c

8) $m\angle B = 35°$, $m\angle C = 12°$, $b = 11$ in
Find c

9) $m\angle C = 125°$, $m\angle B = 18°$, $a = 33$ cm
Find c

10) $m\angle C = 152°$, $m\angle B = 19°$, $b = 25$ ft
Find c

11) $m\angle A = 110°$, $m\angle B = 46°$, $a = 30$ m
Find b

12) $m\angle B = 96°$, $m\angle A = 68°$, $c = 8$ yd
Find b

13) $m\angle C = 76°$, $m\angle A = 34°$, $c = 33$ yd
Find a

14) $m\angle B = 38°$, $m\angle A = 125°$, $c = 10$ km
Find b

15) $m\angle C = 38°$, $m\angle B = 82°$, $a = 7$ yd
Find c

16) $m\angle B = 42°$, $m\angle C = 75°$, $a = 12$ m
Find c

17) $m\angle B = 91°$, $m\angle C = 59°$, $a = 14$ ft
Find c

18) $m\angle C = 88°$, $m\angle A = 30°$, $b = 30$ m
Find a

19) $m\angle A = 19°$, $m\angle B = 46°$, $c = 39$ cm
Find b

20) $m\angle B = 57°$, $m\angle A = 54°$, $c = 30$ in
Find b

21) $m\angle A = 127°$, $a = 17$ in, $c = 10$ in
Find $m\angle C$

22) $m\angle C = 52°$, $c = 33$ yd, $b = 15$ yd
Find $m\angle B$

23) $m\angle A = 66°$, $c = 23$ cm, $a = 24$ cm
Find $m\angle C$

24) $m\angle B = 91°$, $a = 14$ in, $b = 28$ in
Find $m\angle A$

25) $m\angle C = 22°$, $c = 15$ cm, $b = 9$ cm
Find $m\angle B$

26) $m\angle B = 145°$, $a = 27$ in, $b = 33$ in
Find $m\angle A$

27) $m\angle C = 105°$, $c = 23$ m, $b = 14$ m
Find $m\angle B$

28) $m\angle B = 143°$, $a = 15$ yd, $b = 40$ yd
Find $m\angle A$

29) $m\angle A = 145°$, $c = 16$ mi, $a = 48$ mi
Find $m\angle C$

30) $m\angle C = 85°$, $c = 19$ in, $b = 13$ in
Find $m\angle B$

31) $m\angle A = 79°$, $c = 4$ m, $a = 11$ m
Find $m\angle C$

32) $m\angle C = 89°$, $b = 12$ km, $c = 24$ km
Find $m\angle B$

33) $m\angle C = 147°$, $b = 8$ mi, $c = 36$ mi
Find $m\angle B$

34) $m\angle A = 89°$, $a = 33$ cm, $c = 18$ cm
Find $m\angle C$

35) $m\angle A = 99°$, $c = 18$ in, $a = 19$ in
Find $m\angle C$

36) $m\angle C = 105°$, $b = 29$ m, $c = 32$ m
Find $m\angle B$

37) $m\angle B = 115°$, $a = 27$ yd, $b = 49$ yd
Find $m\angle A$

38) $m\angle C = 38°$, $c = 21$ m, $b = 10$ m
Find $m\angle B$

39) $m\angle C = 22°$, $c = 24$ m, $b = 22$ m
Find $m\angle B$

40) $m\angle C = 123°$, $b = 7$ mi, $c = 15$ mi
Find $m\angle B$

Solve each triangle. Round your answers to the nearest tenth.

41) $m\angle A = 133°$, $m\angle C = 25°$, $b = 23$ cm

42) $m\angle A = 154°$, $c = 15$ mi, $a = 42$ mi

43) $m\angle B = 123°$, $m\angle A = 40°$, $c = 15$ ft

44) $m\angle B = 95°$, $a = 5$ in, $b = 24$ in

45) $m\angle A = 137°$, $m\angle B = 23°$, $a = 14$ km

46) $m\angle B = 49°$, $m\angle C = 9°$, $b = 24$ km

47) $m\angle B = 151°$, $a = 10$ cm, $b = 40$ cm

48) $m\angle B = 28°$, $m\angle C = 145°$, $a = 7$ km

49) $m\angle A = 65°$, $m\angle B = 42°$, $a = 19$ m

50) $m\angle C = 134°$, $b = 12$ km, $c = 23$ km

51) $m\angle A = 34°$, $m\angle B = 7°$, $a = 23$ ft

52) $m\angle B = 109°$, $a = 30$ yd, $b = 37$ yd

53) $m\angle A = 105°$, $m\angle C = 14°$, $c = 8$ ft

54) $m\angle B = 93°$, $m\angle A = 22°$, $c = 29$ ft

55) $m\angle C = 24°$, $m\angle A = 22°$, $c = 13$ yd

56) $m\angle A = 66°$, $c = 21$ in, $a = 24$ in

57) $m\angle A = 99°$, $a = 26$ mi, $c = 9$ mi

58) $m\angle A = 28°$, $m\angle B = 14°$, $c = 47$ cm

59) $m\angle A = 100°$, $c = 23$ cm, $a = 36$ cm

60) $m\angle C = 145°$, $m\angle A = 11°$, $c = 48$ yd

Answers to Law of Sines Sides and Angles (LAWSINESSIDEANGLE2)

1) 8 mi
2) 14 yd
3) 31 in
4) 29.9 cm
5) 26 ft
6) 29 in
7) 15 cm
8) 4 in
9) 44.9 cm
10) 36.1 ft
11) 23 m
12) 28.9 yd
13) 19 yd
14) 21.1 km
15) 5 yd
16) 13 m
17) 24 ft
18) 17 m
19) 31 cm
20) 27 in
21) 28°
22) 21°
23) 61.1°
24) 30°
25) 13°
26) 28°
27) 36°
28) 13°
29) 11°
30) 43°
31) 20.9°
32) 30°
33) 7°
34) 33.1°
35) 69.3°
36) 61.1°
37) 30°
38) 17°
39) 20.1°
40) 23°
41) $m\angle B = 22°$, $c = 25.9$ cm, $a = 44.9$ cm
42) $m\angle B = 17°$, $m\angle C = 9°$, $b = 28$ mi
43) $m\angle C = 17°$, $a = 33$ ft, $b = 43$ ft
44) $m\angle C = 73°$, $m\angle A = 12°$, $c = 23$ in
45) $m\angle C = 20°$, $c = 7$ km, $b = 8$ km
46) $m\angle A = 122°$, $c = 5$ km, $a = 27$ km
47) $m\angle C = 22°$, $m\angle A = 7°$, $c = 30.9$ cm
48) $m\angle A = 7°$, $b = 27$ km, $c = 32.9$ km
49) $m\angle C = 73°$, $c = 20$ m, $b = 14$ m
50) $m\angle A = 24°$, $m\angle B = 22°$, $a = 13$ km
51) $m\angle C = 139°$, $c = 27$ ft, $b = 5$ ft
52) $m\angle C = 20.9°$, $m\angle A = 50.1°$, $c = 14$ yd
53) $m\angle B = 61°$, $a = 31.9$ ft, $b = 28.9$ ft
54) $m\angle C = 65°$, $a = 12$ ft, $b = 32$ ft
55) $m\angle B = 134°$, $a = 12$ yd, $b = 23$ yd
56) $m\angle B = 60.9°$, $m\angle C = 53.1°$, $b = 23$ in
57) $m\angle B = 61°$, $m\angle C = 20°$, $b = 23$ mi
58) $m\angle C = 138°$, $b = 17$ cm, $a = 33$ cm
59) $m\angle B = 41°$, $m\angle C = 39°$, $b = 24$ cm
60) $m\angle B = 24°$, $b = 34$ yd, $a = 16$ yd