

TPC

Name _____

Law of Sines (Day 2 - Special Cases)

Date _____ Period _____

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

1) $m\angle C = 58^\circ, b = 25, c = 7$

2) $m\angle C = 130^\circ, m\angle A = 28^\circ, c = 49$

3) $m\angle A = 101^\circ, m\angle C = 72^\circ, b = 4$

4) $m\angle A = 119^\circ, c = 35, a = 32$

5) $m\angle C = 35^\circ, c = 33, b = 5$

6) $m\angle C = 35^\circ, c = 31, b = 27$

7) $m\angle C = 46^\circ, b = 30, c = 29$

8) $m\angle A = 59^\circ, m\angle B = 91^\circ, a = 12$

9) $m\angle A = 9^\circ, m\angle B = 33^\circ, a = 10$

10) $m\angle C = 44^\circ, b = 32, c = 30$

11) $m\angle C = 87^\circ, b = 23, c = 40$

12) $m\angle A = 85^\circ, c = 11, a = 17$

Answers to Law of Sines (ID: 1)

- 1) Not a triangle 2) $m\angle B = 22^\circ, b = 24, a = 30$ 3) $m\angle B = 7^\circ, c = 31.2, a = 32.2$
4) Not a triangle 5) $m\angle A = 140^\circ, m\angle B = 5^\circ, a = 37$
6) $m\angle A = 115^\circ, m\angle B = 30^\circ, a = 49$ 7) $m\angle A = 85.9^\circ, m\angle B = 48.1^\circ, a = 40.2$
Or $m\angle A = 2.1^\circ, m\angle B = 131.9^\circ, a = 1.5$
8) $m\angle C = 30^\circ, b = 14, c = 7$ 9) $m\angle C = 138^\circ, b = 34.8, c = 42.8$
10) $m\angle A = 88.2^\circ, m\angle B = 47.8^\circ, a = 43.2$ 11) $m\angle A = 58^\circ, m\angle B = 35^\circ, a = 34$
Or $m\angle A = 3.8^\circ, m\angle B = 132.2^\circ, a = 2.9$
12) $m\angle B = 54.9^\circ, m\angle C = 40.1^\circ, b = 14$