

Adv. Alg.-Trig.

Homework #9.8

1) $A = 35^\circ 30'$ $B = 24^\circ 35'$ $C = 119^\circ 54'$

Tonight's HW:
 Problem Solving
 Worksheet (Skip #3)
 Laws of Sine/Cosine
 Test Tuesday

Law of Cosines Word Problems

Jan 15-1:03 PM

Dec 15 - 7:28 AM

Problem #1:

A and B are fence posts in an open field. A third fence post, C, is placed 1828 feet from B and 1213 feet from A at an angle of 52 degrees.

a) Find angle A to the nearest minute.
 b) Find AB to the nearest foot.

$$x^2 = 1828^2 + 1213^2 - 2(1828)(1213)\cos 52$$

$$x = 1443'$$

$$\frac{\sin A}{1828} = \frac{\sin 52}{1443}$$

$$\frac{1443 \sin A}{1443} = \frac{1828 \sin 52}{1443}$$

$$A = 86^\circ 37'$$

Dec 15 - 7:29 AM

Problem #2:

A parallelogram has sides of 25 and 31 cm, and an angle of 110 degrees. Find the length of each diagonal.

$$x^2 = 25^2 + 31^2 - 2(25)(31)\cos 110$$

$$x = 46.0$$

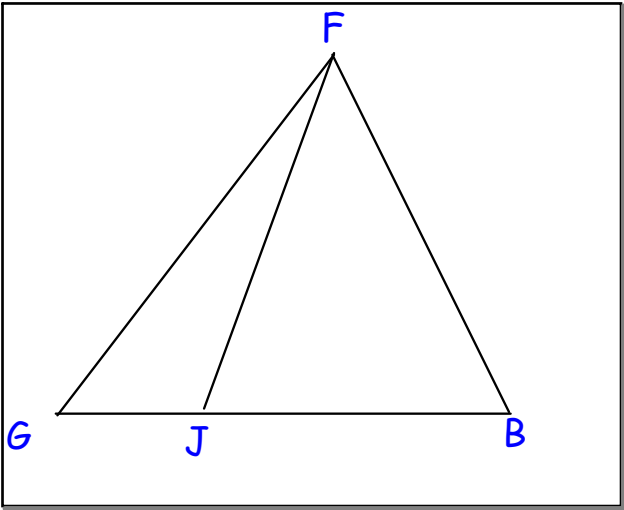
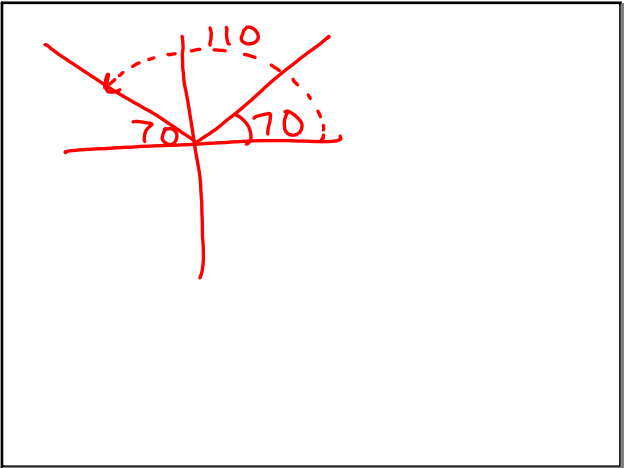
$$y^2 = 25^2 + 31^2 - 2(25)(31)\cos 70$$

$$y^2 = 625 + 961 - 1550 \cos 70$$

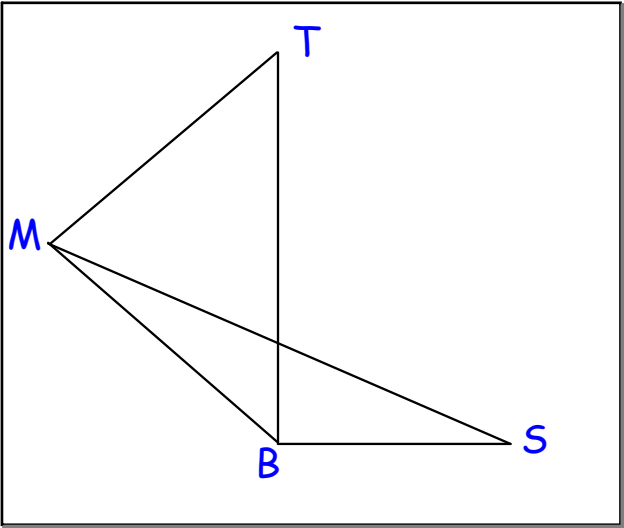
$$y = 32.5$$

Dec 15 - 7:29 AM

hw 2/4/20
 9.8



Jan 28-3:18 PM



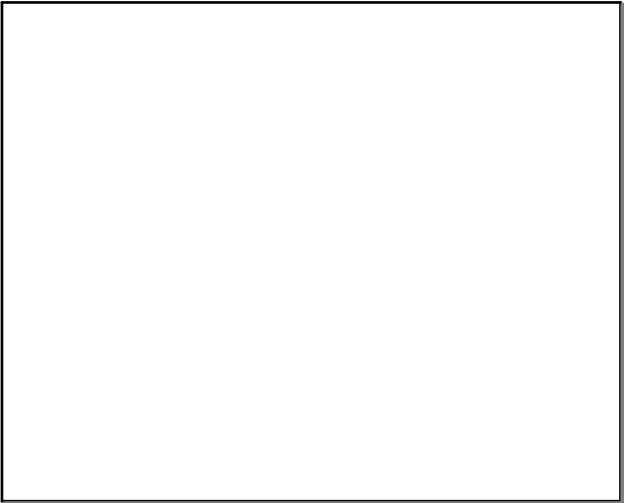
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Tonight's HW:
Problem Solving
Worksheet (Skip #3)
Laws of Sine/Cosine
Test Tuesday!
Thursday

Worksheet - Answer Key

1) 194 ft	2) 86°
4) 18	5) 894 ft

Jan 15-1:10 PM



Jan 24-8:40 AM