**Geometry** (G-SRT.9-11) Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
**Unit 2: Assessment #4 Review 2** (HW34)Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_

1. Solve triangle EFG given that e = 33, g = 22, and E = 74˚. Draw a picture. Round angles to the nearest degree and sides to the nearest tenth.

f ≈ 31.36

G = sin-1 (Ans)

G ≈ 40⁰

F

66⁰

33

22

40⁰

74⁰

G

E

1. Solve triangle ABC given that , , and *b* = 61. Round your answers to the nearest hundredth.

≈ 69.15

B

≈ 81.27

47⁰

56⁰

C

A

61

1. Solve triangle ABC given that *a* = 17, *b* = 13, and *c* = 15. Draw a picture and round to the nearest degree.

B

A ≈ 74⁰

B = sin-1

B ≈ 47⁰

15

17

13

C

A

1. Suppose that three campers have two-way radios with a range of 7920 feet. The distance between sites #1 and #2 is 5750 feet, and the distance between sites #1 and #3 is 6690 feet. If the angle formed with site #1 at the vertex is 82. How far apart are sites #2 and #3 (Round to the nearest whole number)? Can the campers at those sites communicate with their radios?

x ≈ 8192 ft → No, farther than range of 7920 ft

#2

x

5750 ft

#3

6690 ft

#1

1. Find the area of the figure to the nearest tenth **two** different ways.

B

1

Area = ½ (13)(11)sin61

Area ≈ 62.5 u2

29˚

13

h = 11.37

61⁰

Area = ½ (11)(11.37)

Area ≈ 62.5 u2

2

C

A

11

cos29 =

= 13cos29

≈ 11.37