PRECALCULUS

Wednesday, Mar. 30

Back of Assignment Sheet
#1-4
Sec. 7.2 pp. 298-299
13 B, 15 A, 23 A, 25 B, 27 c
Sec. 7.3 pp. 306-309
9 B, 15 C, 21 A, 23 C, 28, 34, 49, 50

Friday, Apr. 1

Vector Operations Handout #1-8

Start Airplane Navigation Project

Wednesday, Apr. 6

Vector Operations Handout #9-10

Sec. 7.5 pp. 322-323
13, 14, 17, 18, 19

Friday, Apr. 8

Parametric Equations Handout

Tuesday, Apr. 12

Journal Due

Review Ch. 7

Work on Project

Applications of Trig Video—5 pts. Extra Credit to watch *(& answer questions)* on select seminars/before/after school

Thursday, Apr. 14

Solving Oblique Triangles & Vectors Test

Wednesday, Apr. 20

Navigation Project Due

Semester Review

Friday, Apr. 22

Semester Review

Tuesday, Apr. 26

TRIGONOMETRY FINAL

1. Given $B = 20°50, C = 103°10', b = 132$ ft, find c.

2. Given $A = 39.70°, C = 30.35°, b = 39.74$ m, find a.

3. A hot air balloonist is directly above a straight road 1.5 miles long that joins two villages. She finds that the town closer to her is at an angle of depression of 35°, and the farther town is at an angle of depression of 31°. How high above the ground is the balloon?

4. Debbie Maybury, a whale researcher standing at the top of a tower, is watching a whale approach the tower directly. When she first begins watching the whale, the angle of depression to the whale is 15°50′. After the whale swims 175 meters closer, she notes the angle of depression is 35°40′. Find the height of the tower to the nearest meter.

Answers:

1. 361 ft
2. 27.01 m
3. 0.49 mi
4. 82.2 m

<u>Sec. 7.2 pp. 298-299</u>
13. $B = 49.1°$ or $130.9°$
15. $A = 112°10'$
23. No triangle
25. $B = 49°20'$ or $130°40'$
27. $c = 37.16$ m or 8.719 m

<u>Sec. 7.3 pp. 306-309</u>
9. $B = 81.3°$
15. $C = 45.6°$
21. $A = 42.0°$
23. $C = 87.4°$
28. 745 mi
34. ≈ 47.5 ft.

<u>Sec. 7.5 pp. 322-323</u>
13. 173.1°
14. a = 156 mph, g = 161 mph
17. 470 mph @ 237°
18. heading = 65°30′; $g = 181$ mph
19. 170 mph @ 358°