Advanced Math
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21-35, 37
44-48 even

2) $\angle A = 61.2°$, $\angle B = 19.2°$, $\angle C = 99.6°$

4) $\angle A = 53.7°$, $\angle B = 21.3°$, $c = 12.0$

6) $\angle A = 39.35°$, $\angle B = 16.74°$, $\angle C = 123.91°$

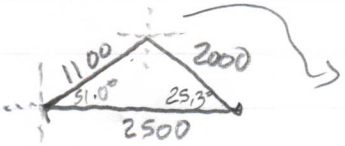
8) $\angle A = 86.7°$, $\angle B = 31.8°$, $\angle C = 61.5°$

10) $\angle B = 16.5°$, $\angle C = 108.5°$, $a = 8.64$

12) $\angle A = 37.1°$, $\angle C = 67.6°$, $b = 9.94$

14) $\angle A = 157.4°$, $\angle B = 7.6°$, $c = 4.21$

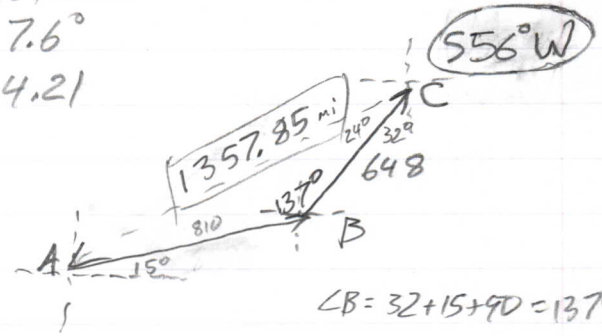
21)



S 64.7° E

N 39° E

22)



$\angle B = 32 + 15 + 90 = 137°$

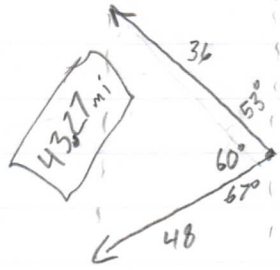
23) 422.55 m

24) 41.23° + 52.93°

25) 72.28°

26) 127.16°

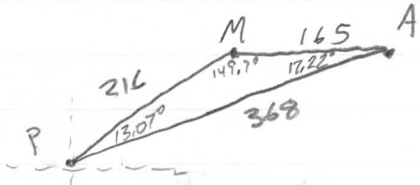
27)



28) 131.12 Ft, 118.56 Ft

29) a) S 58.36° E
b) S 81.49° W

30)



a) N 59.7° E
b) N 72.77° E

31) 63.72 Ft

32) 103.91 FL

33) $\overline{PQ} = 9.4$ Ft
$\overline{QS} = 5.0$ Ft
$\overline{RS} = 12.8$ Ft

34) 24.18 mi

35) a) $7^2 = 1.5^2 + x^2 - 2(1.5)x\cos\theta$

b) $49 - 2.25 = x^2 - 3x\cos\theta$

$46.75 + \frac{9\cos\theta}{4} = (x^2 - 3x + \frac{9\cos^2\theta}{4})$

$46.75 + 2.25\cos\theta = (x - \frac{3\cos\theta}{2})^2$

$\pm\sqrt{46.75 + 2.25\cos\theta} = x - 1.5\cos\theta$

$x = 1.5\cos\theta \pm \sqrt{46.75 + 2.25\cos\theta}$

d) 6 m

37) 2.76 Ft

44) 1350.22 $units^2$

46) 1.623 $units^2$

48) 12 $units^2$