Use formulas for law of sines and/or law of cosines. Show at least your initial step plugging into the formula. Round all sides and angles to 1 decimal. Solve for the missing parts of each triangle.

1)
$$A = 109^{\circ}, B = 34^{\circ}, a = 22$$

2)
$$a = 14.5, c = 13.7, B = 97.5^{\circ}$$

3)
$$A = 51^{\circ}, a = 14, C = 90^{\circ}$$

4)
$$a = 9, b = 21, C = 90^{\circ}$$

BONUS An observer atop a building 430 meters from the Chrysler Building makes the indicated observations. Find the height of the Chrysler Building. All work must be shown, and it must be neat, organized and labeled or there will be no chance for possible bonus.

4 possible points

