

#170 R_g 479 #1-4, 6, R_g 459 #14

1) Approx 6.1 Km

2) Approx 35.33°

3) a) $A \approx 41.4^\circ$

b) $b = 8$

4a) $AC \approx 6.4$ $A \approx 78^\circ$

$C \approx 53^\circ$

b) $D \approx 72^\circ$ $F = 36^\circ$

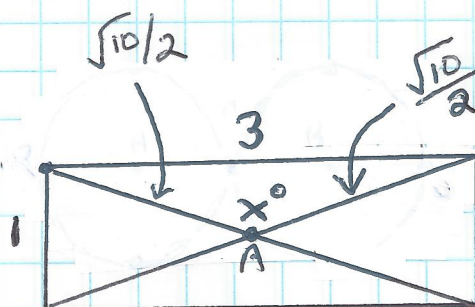
$DE \approx 7.7$

c) $G \approx 114^\circ$ $I \approx 28^\circ$

$H \approx 38^\circ$

6) 112.3°

14) 143° and 37°



3b) $49 = b^2 + 9 - 2(3)(b) \cos 60^\circ$

$40 = b^2 - 6b \cos 60$

$40 = b^2 - 3b$

$0 = b^2 - 3b - 40$

$(b - 8)(b + 5)$

$8 \neq -5$

$a^2 = b^2 + c^2 - 2bc \cos A$

$9 = \frac{5}{2} + \frac{5}{2} - 2\left(\frac{10}{4}\right) \cos A$

$9 = 5 - 5 \cos A$

$4 = -5 \cos A$

$-0.8 = \cos A$

$143^\circ = A$