

Homework

due on Wednesday, April 8

Read carefully chapters 3 and 4 of Hartshorne's book. Solve problems

15.3

18.9,

20.5,

20.14 Hint: Let the given lines be A_1A_2 , A_2A_3 , A_1A_3 and l , where l intersects A_1A_2 at B_3 , A_1A_3 at B_2 and A_2A_3 at B_1 . Consider circles C_1 on diameter A_1B_1 and C_2 on diameter A_2B_2 . Prove that each of the four orthocenters has the same power with respect to C_1 and C_2 .