Chapter 3 Test Prep

PART 1 (Friday Oct. 26)

1. MULTIPLE CHOICE
    a. Given a diagram, identify lines that are skew, parallel, and perpendicular
    b. Parallel Lines and Transversals
        i. Use angle measures to determine which lines MUST be parallel
        ii. Determine the information that could be used to prove that two lines are parallel (i.e. "angles 1 and 3 must be congruent because they are corresponding" or "angles 4 and 5 must be supp. because they are consecutive interior" etc.)
        iii. Given the measure of one angle with parallel lines and a transversal, find other unknown angle measures
        iv. Identify angle relationships (i.e. "angles 1 and 4 are alternate interior angles")
    c. Lines in the Coordinate Plane
        i. Given the graph of a line, determine which equation matches the graph.
        ii. Given an equation of a line, determine which equation is parallel/perpendicular/coincides to the given line.
2. FREE RESPONSE
    a. Know and explain the difference between parallel and skew lines.
    b. Parallel Lines and Transversals
        i. Given the measure of one angle with parallel lines and a transversal, find other unknown angle measures
        ii. Identify angle relationships (i.e. "angles 1 and 4 are alternate interior angles")
        iii. Given a diagram, set up algebraic equations to solve for unknown variables and angle measures.
            1. REVIEW SOLVING SYSTEMS OF EQUATIONS!!!!
        iv. Solve "crook" problems (similar to #43 and #44 in warm-ups)
    c. Two-column proof (just one!)
        i. You will write the entire proof yourself ☺

PART 2 (Tues. 10/30)

1. FREE RESPONSE
    a. Find coordinate points that match given information about parallel/perpendicular lines (similar to HW #3-7 problem #44)
    b. Find the distance between a point and a line
    c. Write the equation of a line passing through two distinct points
    d. Write the equation of a line passing through a point and a given x- or y-intercept.
    e. Write the equation of a horizontal/vertical line passing through a given point
    f. Write the equation of a line parallel/perpendicular to a given line through a point
    g. Given two points, write the equation of the perpendicular bisector of the segment with those endpoints. (similar to HW #3-7, problem #28)
    h. Constructions
        ii. Perpendicular line through a point NOT on the line
        iii. Perpendicular line through a point on the line
        iv. Parallel line through a point not on the line