Geometry Honors-Chapter 1 Mixed Review Worksheet

1. The line y= -3 is a reflection of the line y=5. What is the equation for the line of reflection?
2. The midpoint of AC is B(5/3, 3). If A(2/3, -5), find the coordinates for C.
3. WZ has endpoints W(-3, -8) and Z(5, 12). Point X lies between W and Z, such that WX=1/4WZ. Find the coordinates of X.
4. Draw <ABC. Construct its angle bisector BD. Construct <EFG=3(m<DBC).
5. Show algebraically that (-2, -2), (0, 3) and (2, 8) are collinear.
6. What is the equation of the line through those points in slope-intercept form?
7. Graph ΔEFG with vertices E(0, -4), F(-4, -4), and G(0, 2) translated by

(x, y) (x+2, y – 1).

1. If B is between A and C, and AB= 4x - 1, BC=2x - 1, and AC=5x, solve for x and find the length of AC.
2. Construct the perpendicular bisector to AB. (Make your own AB).
3. Find M, the midpoint of RS, if R(-4, 2) and S(3, -1). Use the distance formula to verify that M is the midpoint.
4. Rays PQ and QR are perpendicular. Point S lies in the interior of <PQR. If m<PQS=4+7x and m<SQR=9+4x, find m<PQS and m<SQR.

1. An ice-resurfacing machine is used to smooth the surface of the ice at a skating rink. The machine can resurface 240 square yards of ice in one minute. About how many minutes does it take the machine to resurface a rectangular skating rink that is 230 feet long and 90 feet wide?
2. The measure of an angle’s supplement is 44 less than the measure of the angle. Find the measure of the angle and its supplement.
3. ΔPQR has vertices P(-1, 3), Q(-3, -1), and R(4, -1). Find the perimeter and area of ΔPQR.
4. Write the coordinate rule for ΔJKL reflected about the y-axis. Write the coordinates for ΔJ’K’L’ if J(2, 3), K(6, 0), and L(8, 7).

15) <ABC and <CBD are a linear pair. If m<ABC=3x2+27 and m<CBD=x2+72, solve for x.