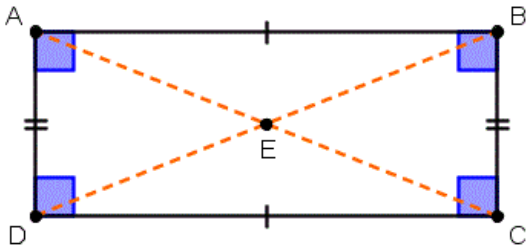
Name: _____

6.REV.3 – END OF CHAPTER REVIEW

Past due on: _____ Period: _____

RECTANGLES

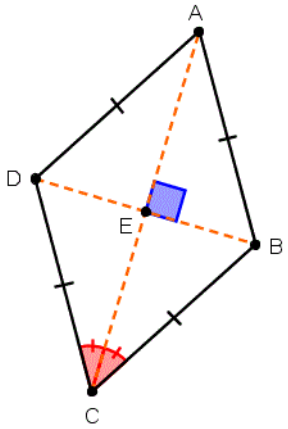
1. Set up and solve an equation to find the value of m if $m\angle ADB = 9m - 6$ and $m\angle BDC = 2m + 8$.



2. Set up and solve a quadratic equation to find the value of n (that makes sense) if $AC = 5n^2 - 8$ and $BD = -18n$.

RHOMBI

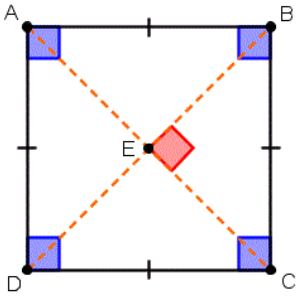
3. Set up and solve a system of equations to find the values of x and y if $AE = -20x - 30y, BE = -6x + 10y, CE = 20,$ & $DE = 44$. What is the area of $ABCD$?



4. Set up and solve an equation to find the value of d if $m\angle DCA = 6d - 2$ and $m\angle BCA = 4d + 8$.

SQUARES

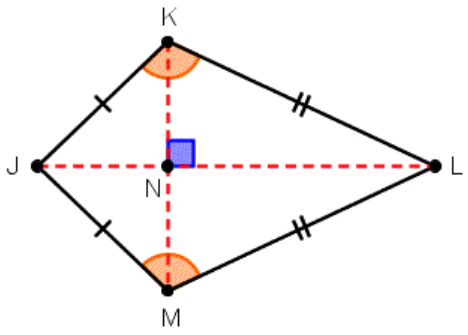
5. Set up and solve two equations to find the values of m and n if $AB = 2m - 7, BC = 2n - 5, CD = 3n - 9,$ and $AD = n - 1$.



6. Set up and solve a system of equations if $AB = 9x - 6y,$ $CD = 4x - 4y,$ & $BC = 24$.

KITES

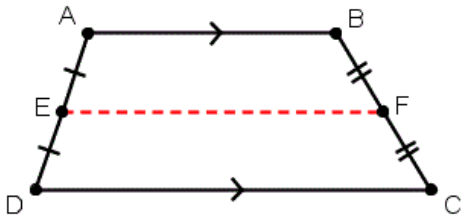
7. Set up and solve a system of equations to find the values of x and y if $JK = 18, KL = 57, JM = 2x + 8y, LM = y - 18x$.



8. Set up and solve a quadratic equation to find the value of x (that makes sense) if $m\angle JKL = 8x$ & $m\angle JML = 2x^2 - 10$.

TRAPEZOIDS

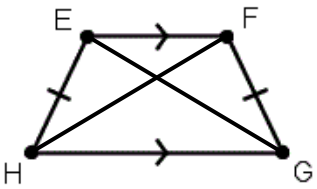
9. Set up and solve an equation to find the value of w if $m\angle D = 11w + 8$ and $m\angle A = 95°$.



10. Set up and solve an equation to find the value of x if $AB = x, CD = 4x + 7,$ & $EF = 2x + 4$

ISOSCELES TRAPEZOIDS

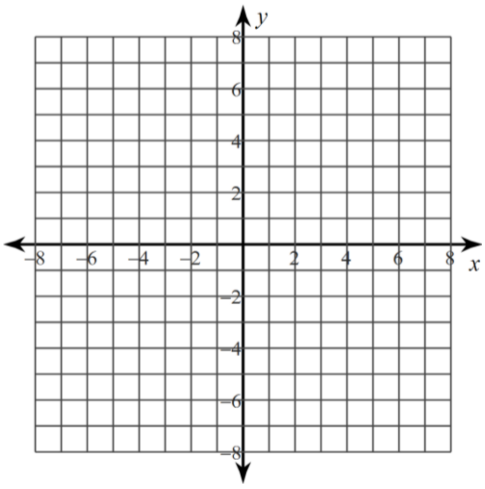
11. Set up and solve a quadratic equation to find the value of a (that makes sense) if $m\angle EHG = 3a^2 - 60$ & $m\angle FGH = -8a$. Then find $m\angle HEF$.



12. Set up and solve a system of equations to find the values of x and y if $EH = -34x - 16y, FG = 18, EG = 24,$ and $FH = 7y - 17x$.

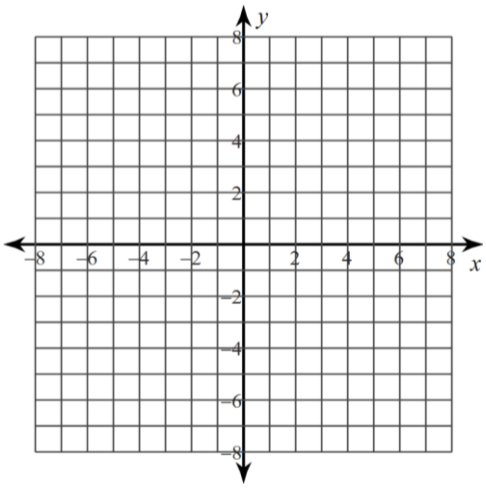
Graph the quadrilateral described. Find the indicated measures. Explain why $FGHJ$ is the quadrilateral identified.

13. $F(-4,-2), G(-2,2), H(4,3), J(2,-1)$



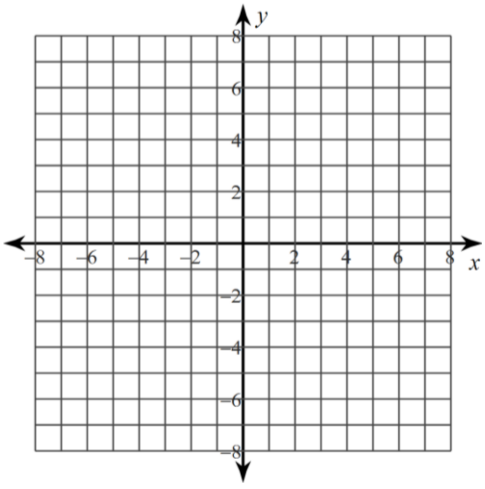
Find $m_{FG}, m_{HJ}, FG, \& HJ$. Explain how these measurements prove that $FGHJ$ is a parallelogram.

14. $F(-4,-1), G(-3,2), H(3,0), J(2,-3)$



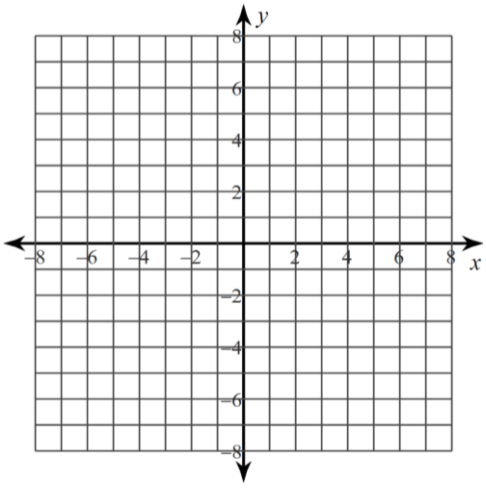
Find m_{FG}, m_{HJ}, m_{GH} & m_{FJ}. Explain how these measurements prove that $FGHJ$ is a parallelogram and a rectangle.

15. $F(-5,-1), G(-2,4), H(3,1), J(0,-4)$



Find $m_{FG}, m_{HJ}, m_{GH}, m_{FJ}, m_{FH}$ & m_{GH}. Explain how these measurements prove that $FGHJ$ is a parallelogram and a square.

16. $F(-4,-3), G(0,3), H(4,3), J(8,-3)$



Find $m_{GH}, m_{FJ}, m_{GF}, m_{HJ}, FH$ & GJ. Explain how these measurements prove that $FGHJ$ is an isosceles trapezoid.