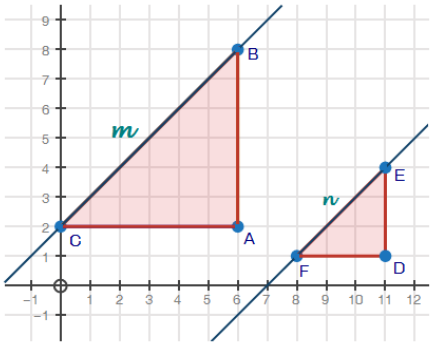
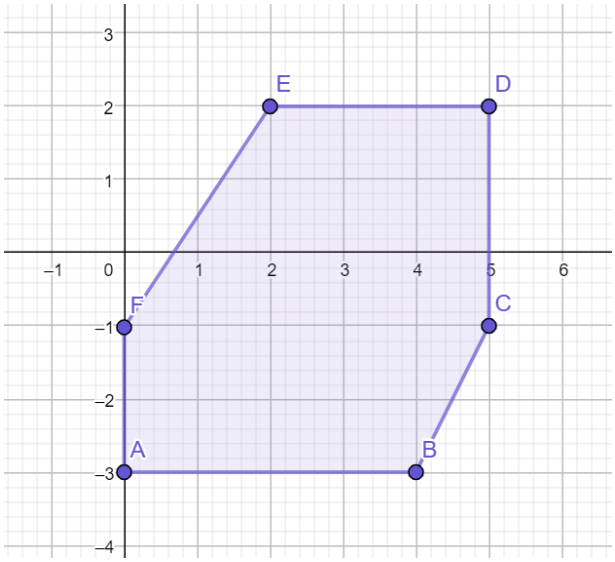
Module 4 Review Toolbox

***Module 4 Help sheet:** https://bit.ly/V22_Mod4HelpSheet

Question/Topic:	**Room to work & Video:**
Key Words: Parallel Perpendicular Slope formula Distance Formula Midpoint formula Equilateral Isosceles Right Scalene Quadrilateral Parallelogram Kite Rectangle Rhombus Square Trapezoid Slope-intercept Form Point-slope form Standard form Area Perimeter Altitude Pythagorean Theorem	***Please be sure you know and understand the meaning of each word, formula, or theorem. These can all be found throughout the toolbox note guides for Module 4.**
Question 1: Timmy and Josh are working together to determine if quadrilateral CDEF with coordinates C(2, 3), D(1, 2), E(4, 1), and F(5, 3) has perpendicular sides. Timmy sets up the following equations: $m_{CD} = \frac{2-3}{1-2}$ $m_{DE} = \frac{1-2}{4-1}$ Josh sets up the following equations: $m_{CD} = \frac{2-3}{1-2}$ $m_{EF} = \frac{3-1}{5-4}$ Who is on the right track?	**Video:**Mod4Review_Question1
Question 2: Segment AB falls on line 6x + 3y = 9. Segment CD falls on line 4x + 2y = 8. Are segments AB and CD perpendicular, parallel, or neither?	**Video:**V22_Mod4Review_Q2

Question 3: Triangle ABC is similar to triangle DEF. Using the image below, write the equation, in slope-intercept form, of the side of the triangle DEF that is parallel to BC.  	**Video:** Geo402-video11
Question 4: An engineer is rerouting traffic in order to work on a stretch of road. The equation of the path of the old route is y = 2/5(x − 4). What should the equation of the new route be if it is perpendicular to the old route and will go through point (S, T)?	**Video:** Mod4Review_Question4
Question 5: Triangle DEF has vertices located at D (0, 3), E (3, 3), and F (5, -1). Part A: Find the length of each side. Part B: Find the slope of each side. Part C: Classify the triangle and explain.	**Video:** Geo401-video13
Question 6: Write the equation of a line in standard form that has x-intercept (−A, 0) and y-intercept (0, −B).	**Video:**Mod4Review_Question6

Question 7: A point F is on segment AZ with endpoints A(1, −3) and Z(5, 1). F partitions the segment in a 3:1 ratio. What point is F?	**Video:** Geo403-video11
Question 8: Find the area of the following shape.  	**Video:** Geo403-video12
Geometry EOC Review:** Find the weighted average of the numbers -1 and 5 with a weight of ¼ on the first number and ¾ on the second number. ***Note*- This same question could also be worded like this on the EOC:* What point on the number line is ¾ the way from the point -1 to the point 5?	**Video:** Mod4Review_EOC
*****No Honors lesson in Module 4*****	