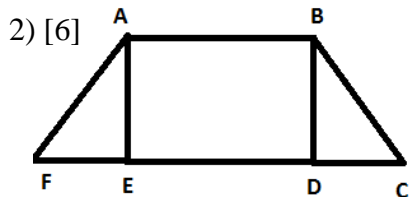
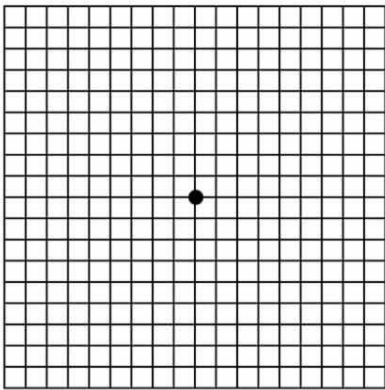


Name: \_\_\_\_\_  
 Date: \_\_\_\_\_  
 Class: \_\_\_\_\_

Geometry  
 Unit 8  
 EC

To be eligible to receive extra credit on the unit test you must have a score below 75. To receive extra credit you must score an 80% or higher on this assignment (anything lower results in no extra credit). If you earn extra credit is calculated in the following manner:  $\text{Old Test Score} + (75 - \text{Old Test Score})(2/3) = \text{New Test Score}$ . This assignment will not be accepted late for any reason other than missing the day of school it is due in which case it must be turned in the next day you are in school even if you do not have class.

1) [6] If  $A(0, 0)$ ,  $B(2, 5)$ , and  $C(7, 3)$  is the triangle a right triangle? Place point D so that ABCD is a rectangle and prove it is a rectangle.



Given: ABDE is a rectangle  
 $\overline{FE} \cong \overline{DC}$

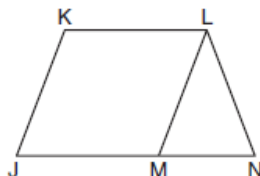
Prove: ABCF is an isos trapezoid

3) [6] Given: JKLM is a parallelogram.

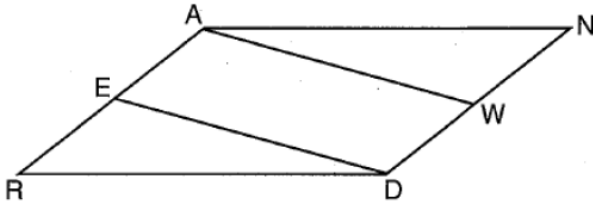
$$\overline{JM} \cong \overline{LN}$$

$$\angle LMN \cong \angle LNM$$

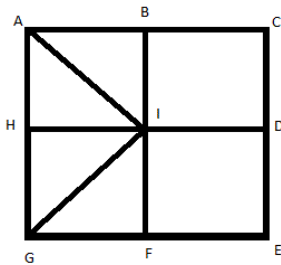
Prove: JKLM is a rhombus.



4) [6] If  $AWDE$  is a parallelogram and  $\overline{AR} \cong \overline{DN}$  prove  $ANDR$  is a parallelogram.



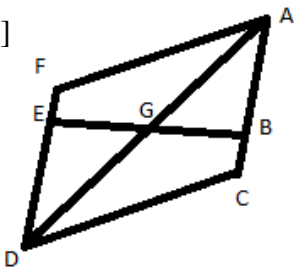
5) [8]



Given:  $BCEF$  is a rectangle  
 $BCDI$  is a square  
 $ACEG$  is a parallelogram  
 $B$  and  $F$  are midpoints  
 $\overline{IF} \cong \overline{ID}$

Prove:  $\triangle AIH \cong \triangle GIH$

6) [4]



Given:  $\overline{EF} \cong \overline{BC}$   
 $\overline{EB}$  and  $\overline{AD}$  bisect each other  
 Prove:  $ACDE$  is a parallelogram