Name Answers Date

1.5 – Classifying Polygons

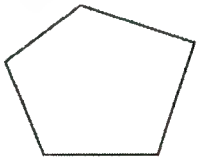
Classify each polygon. Assume the sides of the chips and crackers are straight.

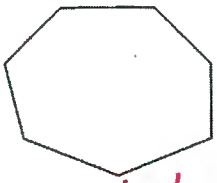
1)  Triangle

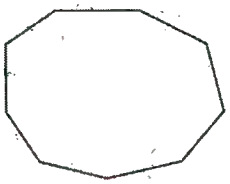
2)  Quadrilateral

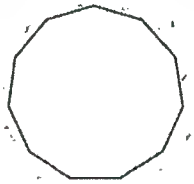
3)  Hexagon

4)  Octagon

5)  Pentagon

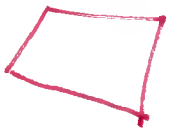
6)  Heptagon

7)  Nonagon

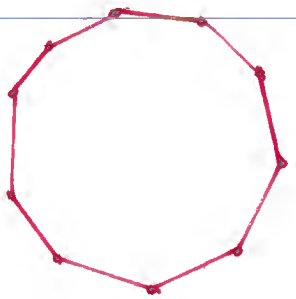
8)  Undecagon

Try your best to draw an example of each polygon. If it's so difficult to draw them, you are allowed to cut and paste a picture from the internet in the space provided.

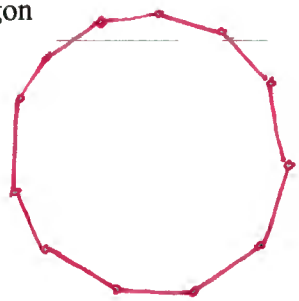
9) Quadrilateral



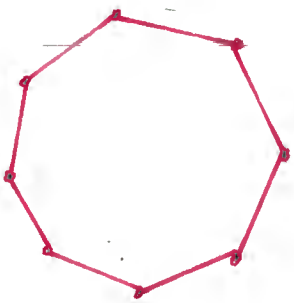
10) Decagon



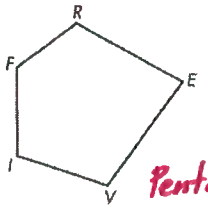
11) Dodecagon



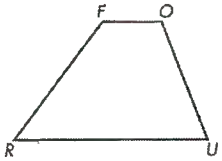
12) Octagon



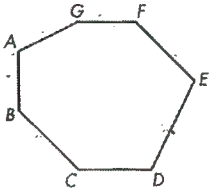
Name the following polygons using the vertices.

13) 

Pentagon FIVER

14) 

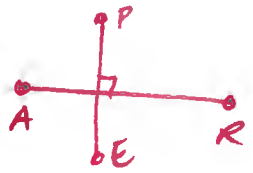
Quad. FOUR

15) 

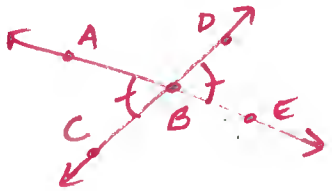
Heptagon ABCDEFG

For the following, sketch and carefully label the figure described.

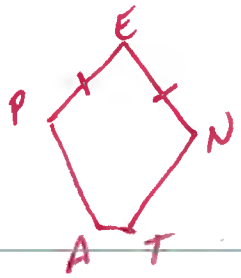
16) $\overline{PE}$ perpendicular to $\overline{AR}$



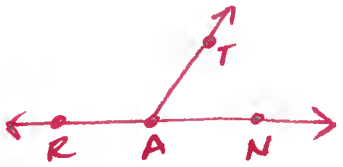
17) Vertical angles $\angle ABC$ and $\angle DBE$



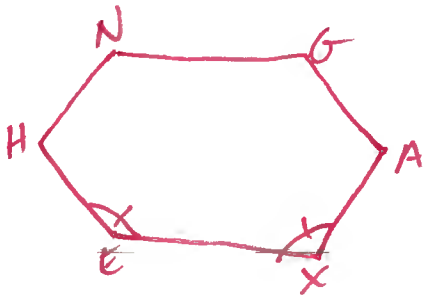
18) Pentagon *PENTA* with *PE=EN*.



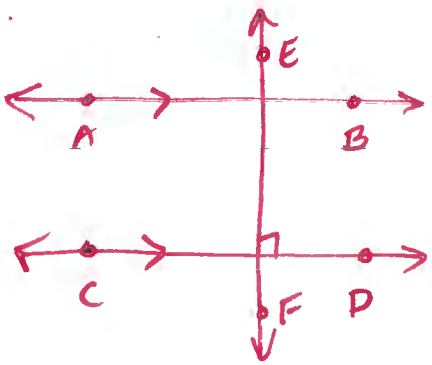
19) Supplementary angles $\angle RAT$ and $\angle TAN$



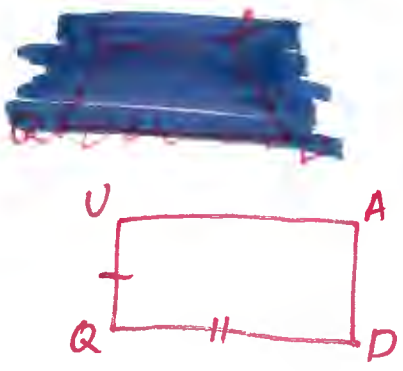
20) Hexagon NGAXEH with $\angle HEX \cong \angle EXA$



21) $\overrightarrow{AB}$, $\overrightarrow{CD}$, and $\overrightarrow{EF}$ with $\overrightarrow{AB} \parallel \overrightarrow{CD}$ and $\overrightarrow{CD} \perp \overrightarrow{EF}$.



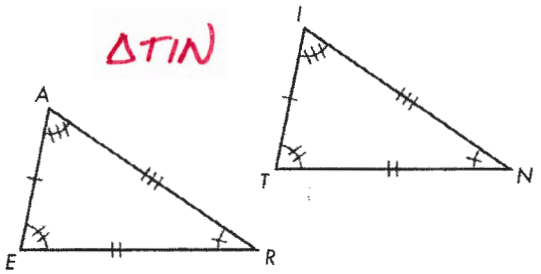
22) Equiangular quadrilateral *QUAD* with $QU \neq QD$.



From the information given, determine the correct congruence statement.

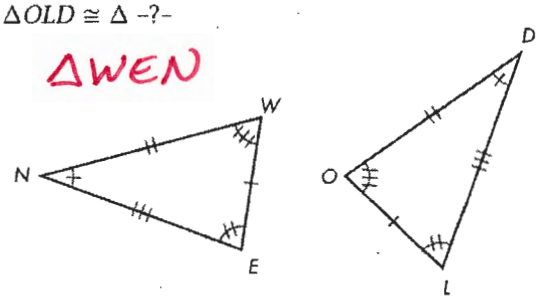
23) $\Delta EAR \cong \Delta$ -?-

ΔTIN



24) $\Delta OLD \cong \Delta$ -?-

ΔWEN



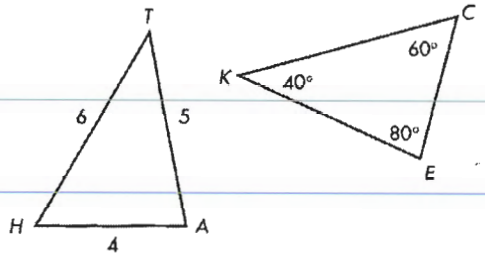
Find the missing measures in each pair of congruent polygons.

25) $\Delta HAT \cong \Delta CEK$

$m\angle H =$ 60° $\quad CE =$ 4

$m\angle A =$ 80° $\quad EK =$ 5

$m\angle T =$ 40° $\quad CK =$ 6



26) $THINK \cong POWER$

$PR =$ 34 $\quad RE =$ 58

$EW =$ 20 $\quad WO =$ 44

$PO =$ 28