Chapter 3 Constructions Assignment #3

1. To find the **circumcenter** of a triangle, you have to construct the triangle's three _____.

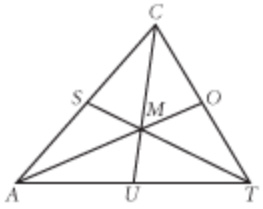
2. To find the **incenter** of a triangle, you have to construct the triangle's three _____.

3. To find the **orthocenter** of a triangle, you have to construct the triangle's three _____.

4. To find the **centroid** of a triangle, you have to construct the triangle's three _____.

5. Birdy McFly is designing a large triangular hang glider. She needs to locate the center of gravity for her glider. What point does she need to locate? _____ Birdy wishes to decorate her glider with the largest possible circle within her large triangular hang glider. Which point of concurrency does she need to locate? _____

6. Point *M* is the centroid.



CM = 16

MO = 10

TS = 21

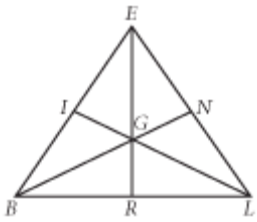
AM = _____

SM = _____

TM = _____

UM = _____

7. Point *G* is the centroid.



GI = *GR* = *GN*

ER = 36

BG = _____

IG = _____

8. Point *Z* is the centroid.

CZ = 14

TZ = 30

RZ = *AZ*

RH = _____

TE = _____