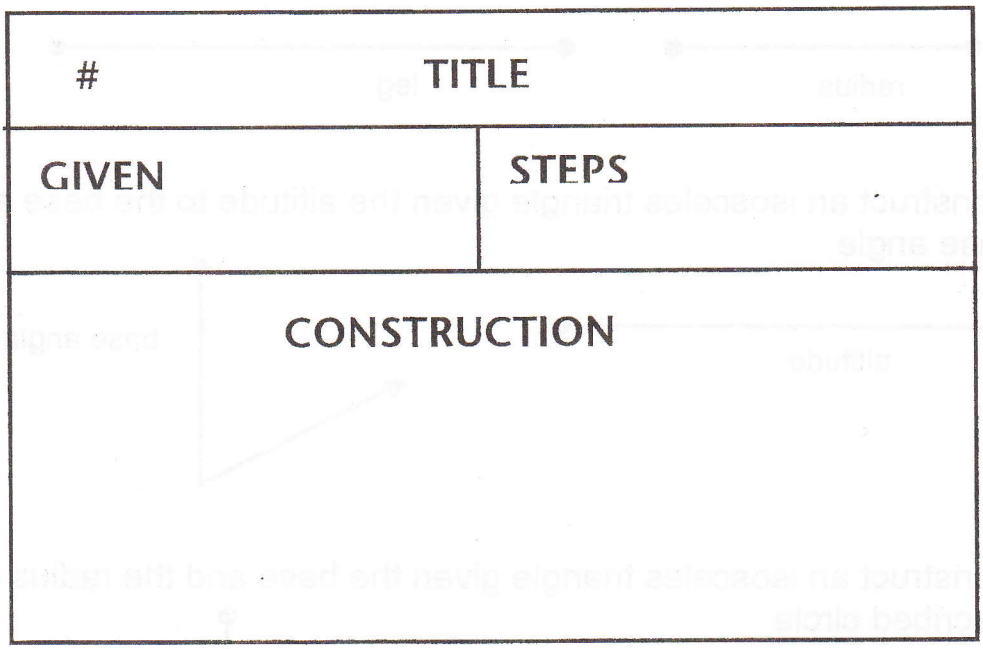
Geometry Construction Project – Due Thursday May 26th
Mrs. Linton

Guidelines/Parameters

- Projects will be in pairs. Choose your own partner.
- Choose 8 of the attached constructions to do.
- Projects will be assembled into "books". There can only be one construction per page.
- Each page will be in landscape format, laid out in the following manner:

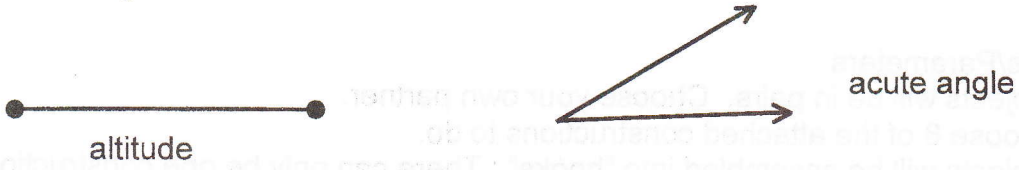


- Rubric:
  - Cover (creativity counts) 5 points
  - Overall neatness/layout 5 points
  - Each construction is 5 pts (neatness and accuracy) 40 points

  50 points

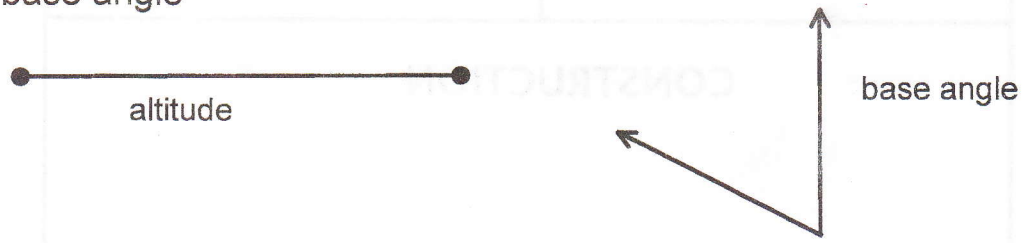
NOTE: Constructions must be accurate, precise, and neat! You must CLEARLY show all of your construction marks. If you make a mistake, make sure you erase completely. Too many erase marks will affect your neatness score!

1. Construct a right triangle given the altitude to the hypotenuse, and an acute angle

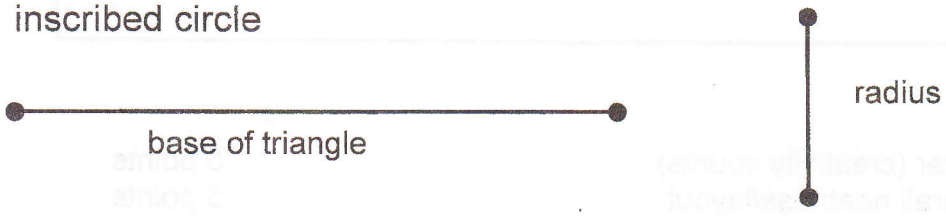


2. Construct a right triangle given a leg and the radius of a circumscribed circle

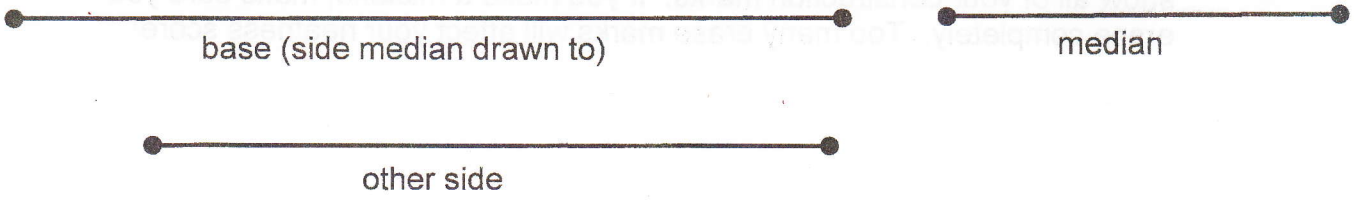
3. Construct an isosceles triangle given the altitude to the base and a base angle



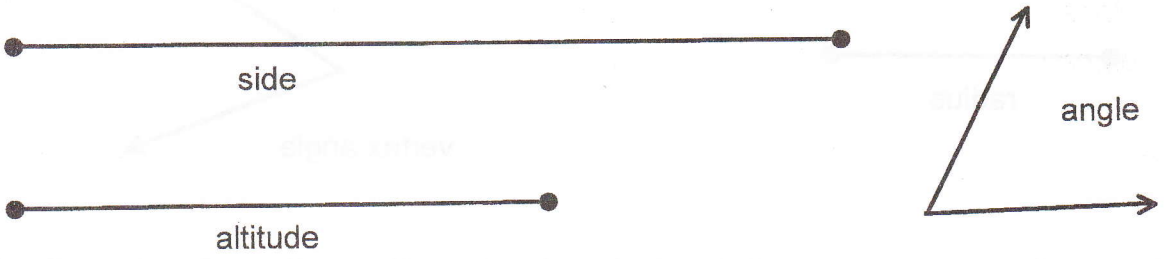
4. Construct an isosceles triangle given the base and the radius of an inscribed circle



5. Construct a triangle given the base, the median to the base, and one of the other sides



6. Construct a parallelogram, given one angle, one side, and the altitude to that side

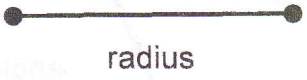


7. Construct an isosceles trapezoid given one base, the diagonal, and the angle included by them.

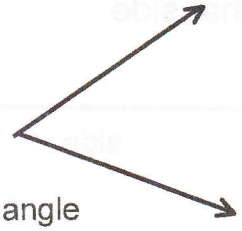
8. Construct a right triangle give both the altitude and median to the hypotenuse

9. Construct an isosceles triangle give the vertex angle and the radius of a circumscribed circle

10. Construct an isosceles triangle given the vertex angle and the radius of an inscribed circle



radius

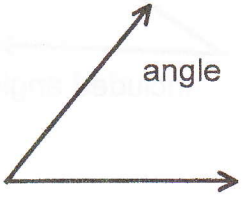


vertex angle

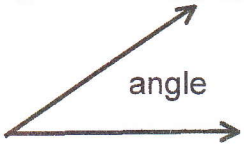
11. Construct an equilateral triangle given the radius of an inscribed circle

radius

12. Construct a triangle given two angles and the altitude to the included side



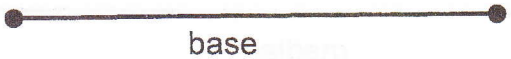
angle



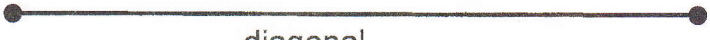
angle

altitude

13. Construct an isosceles trapezoid given the bases and the diagonal



base



diagonal

base

14. Construct a line tangent to a given circle and perpendicular to a given line.