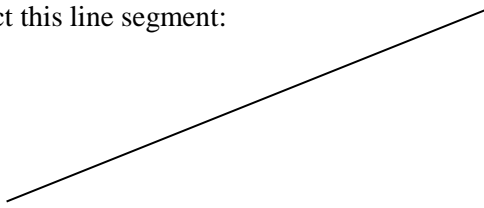


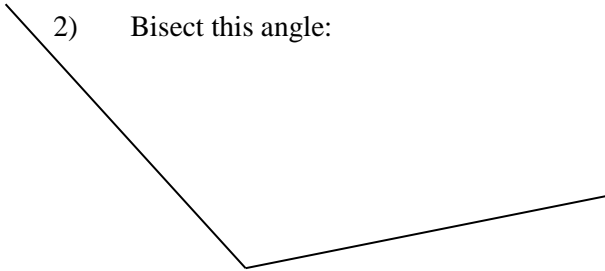
# Euclidean Constructions: Sheet #1

Instructions: Use only a compass and a straight edge for each construction.

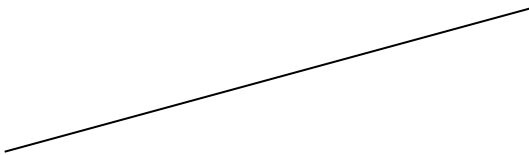
- 1) Bisect this line segment:



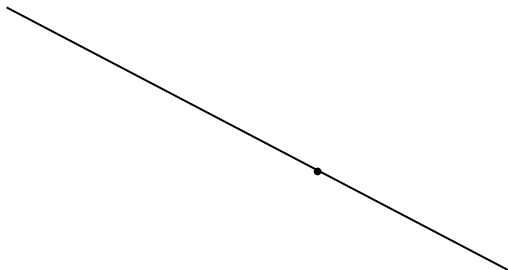
- 2) Bisect this angle:



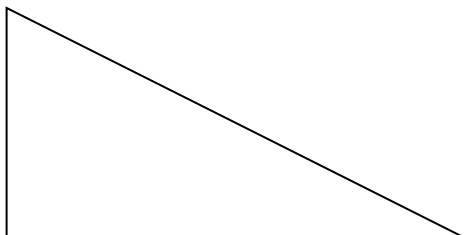
- 3) Draw a line through the point that is perpendicular to the line:



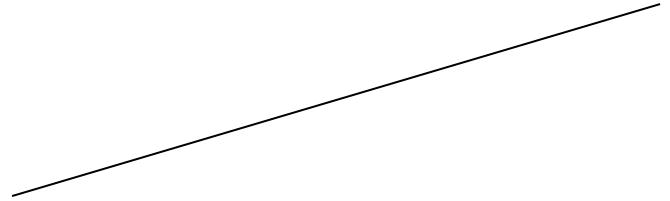
- 4) Draw a line through the point that is perpendicular to the line:



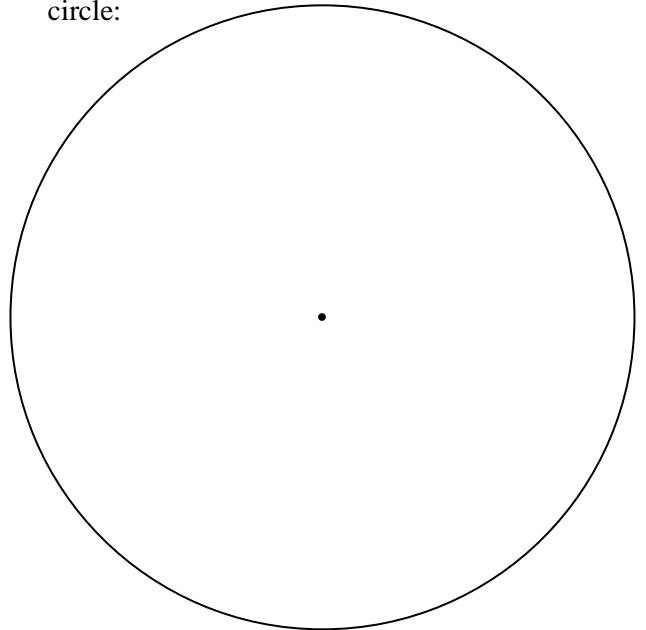
- 5) Construct a square onto the hypotenuse of this right triangle:



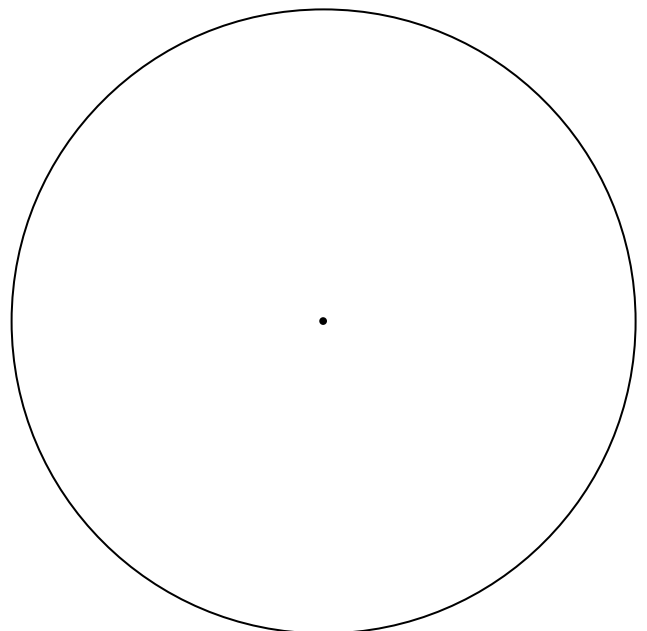
- 6) Draw a line through the point that is parallel to the line:



- 7) Construct a regular hexagon inside this circle:



- 8) Construct a pentagon inside this circle:



Instructions: Describe, in general terms, how you could do each construction. If you get stuck on one, then move to the next one and come back to it later.

9) The division of an angle into four equal parts.

10) The division of an angle into three equal parts. (The trisection of an angle.)

11) The construction of a 12-gon.

12) The construction of a 10-gon.

13) The construction of a 15-gon.

14) The construction of a 7-gon.

15) The construction of a 17-gon.

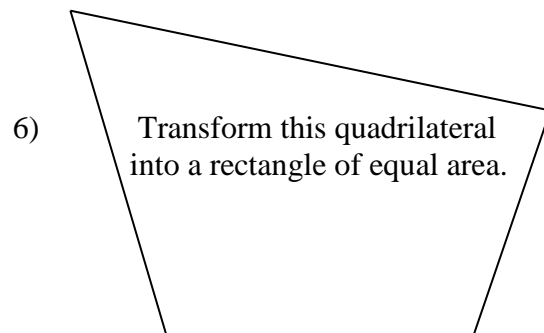
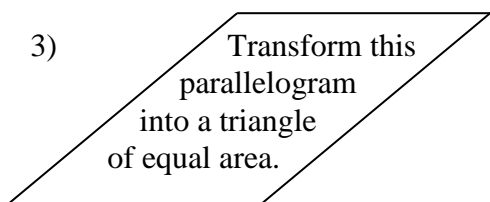
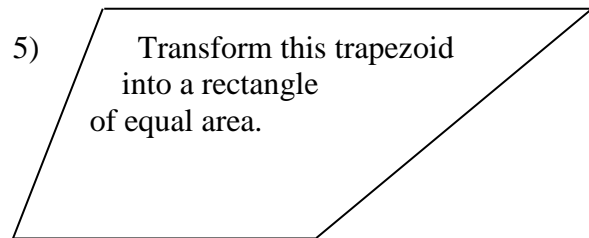
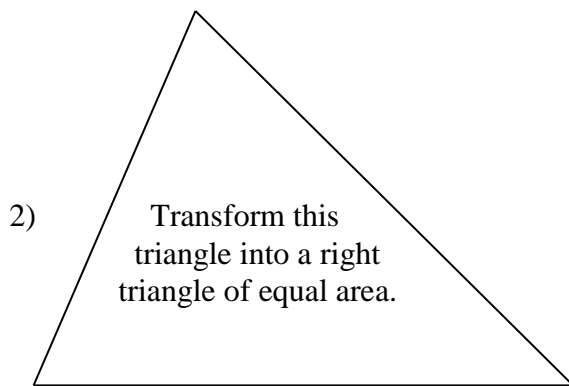
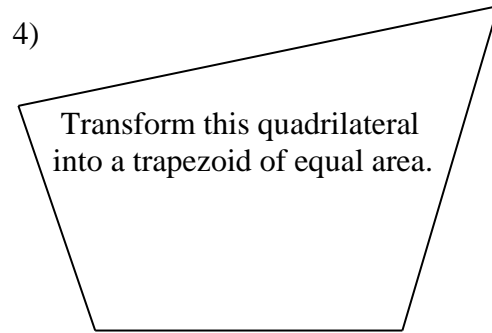
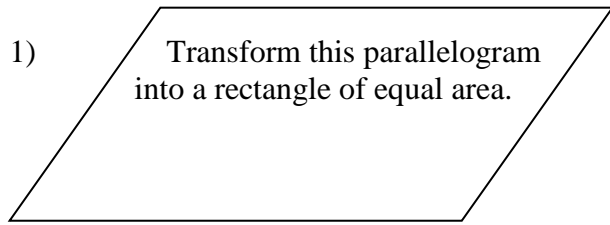
16) Finding the center of a given circle.

17) The division of a line into 7 equal parts.

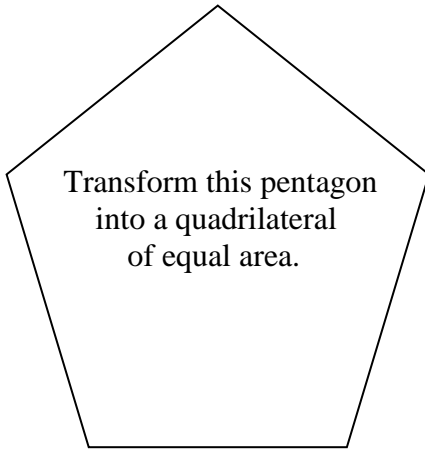
18) The construction of a line tangent to a given circle (where the center of the circle is given) through a given point outside the circle.

# Euclidean Constructions: Sheet #2

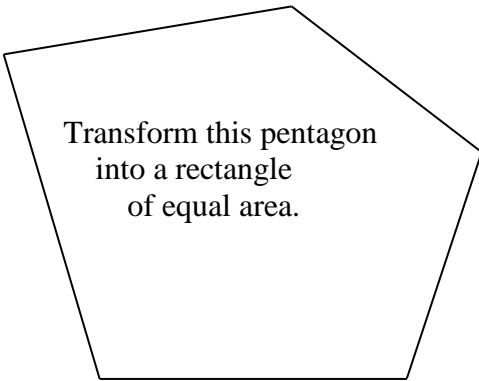
Instructions: Use only a compass and a straight edge for each transformation.



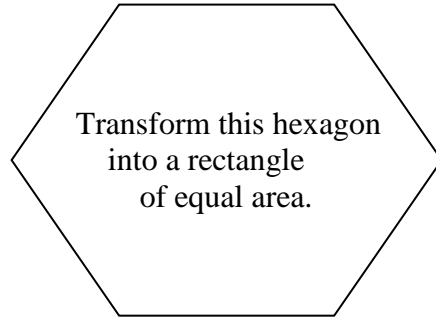
7)



8)



9)



10)

