

ONE and TWO

Objectives:

- understand symbolism of 1 and 2
- compare and contrast drawing and constructing
- use a straight edge and compass
- construct
 - copy a segment
 - copy an angle
 - perpendicular bisector
 - angle bisector

SYMBOLISM [notes]

one:

two:

Drawing vs. Constructing

Construction:

Straight edge

Compass

Construction Tools Contract

My signature confirms that I understand the rules of using a compass and straightedge. Should I choose to use these tools in a manner deemed inappropriate by Ms. Gorsuch, I understand they may be taken away and my grade in the class may suffer depending on the situation.

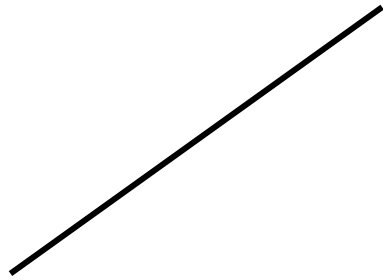
Constructions

[Circle]

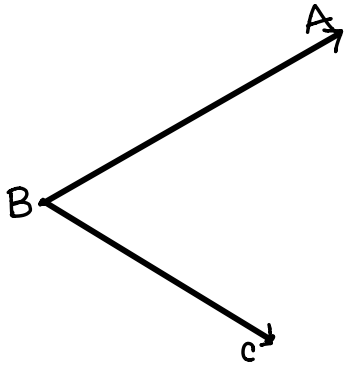
1. Start with a point
2. set the spike on the point
3. swing the pencil around in an arc

[Copy a segment]

1. set your compass so that the spike is on one endpoint ^(A) and the pencil is on the other (B)
2. with your straightedge, draw a new segment longer than AB
3. use the length set on your compass to mark the new segment.



[copy an angle]



Notes

Perpendicular

Bisector

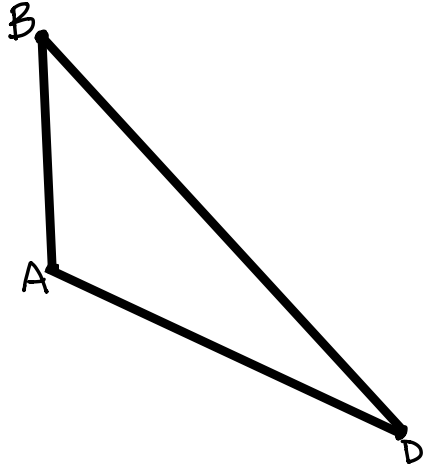
BISECTORS

[Perpendicular Bisector]

[Angle Bisector]

Homework

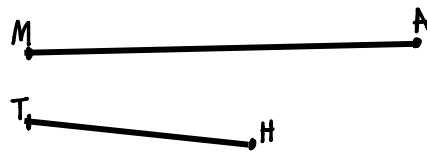
1) Recreate $\triangle BAD$ (think about how you copy segments and angles)



2) Using \overline{MA} and \overline{TH} create a segment with length

a) $\overline{MA} + \overline{TH}$

b) $\overline{MA} - \overline{TH}$



3) Divide \overline{TR} into 4 equal segments

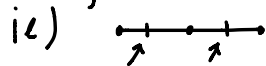
a) start by constructing a perpendicular bisector on \overline{SR}

b) label the midpoint G

c) construct the perpendicular bisectors of \overline{TG} and label it I

d) construct the \perp bisector of \overline{GR} and label it E

e) show each segment is congruent with " marks



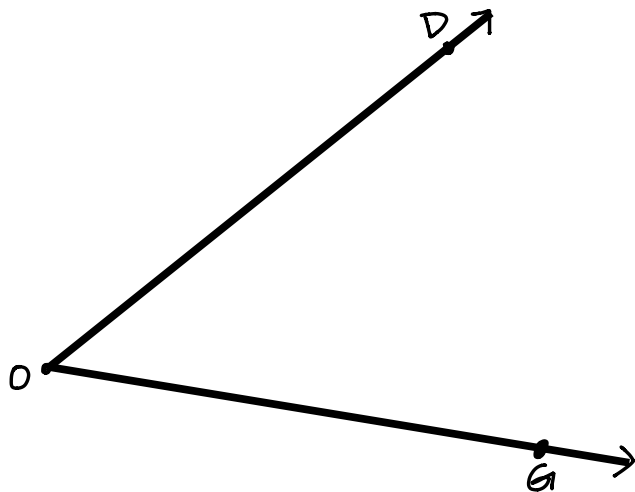
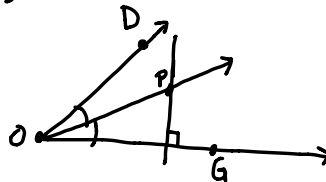
4) a) Bisect $\angle DOG$

b) label point A on the bisector

* c) construct a perpendicular line to \overline{OG} that goes through A

*tricky

Answer should look like this →



5) Chose one of the following to recreate

