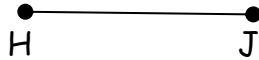


## Copying a segment and bisecting a segment

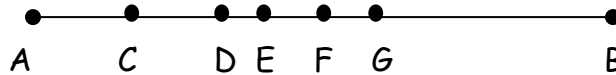
You may *ONLY* use a compass and straight edge (no ruler or protractor) to complete this worksheet. Leave all construction marks to show your work.

**Check for understanding:**

1. Using point A as one endpoint, which segment below is congruent to  $\overline{HJ}$ ? \_\_\_\_\_



2. Which point is the midpoint of  $\overline{AB}$ ? How do you know?

**Practice. C-level**

- 3.

- a. Copy each of the above segments, label them  $\overline{A'B'}$ ,  $\overline{C'D'}$  and  $\overline{E'F'}$ .



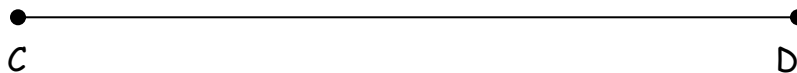
- b. Construct  $\overline{GJ}$  with length  $AB + CD$



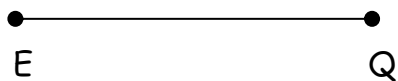
- c. Construct  $\overline{HK}$  which length  $AB + 2EF - CD$



4. Construct the perpendicular bisectors to divide  $\overline{CD}$  into four congruent segments.



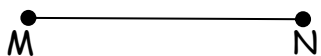
5. Construct equilateral triangle,  $\triangle RST$ . Each side length must be congruent to  $\overline{EQ}$ .



What is the measure of the angles? \_\_\_\_\_

**Practice: B Level**

6. Using  $\overline{MN}$  as the base, construct isosceles triangle  $\triangle MNR$  that is not equilateral.



7. Construct a Right triangle.