

(DN) Describe how to make a scale drawing using the ratio method (from lesson 5.2)

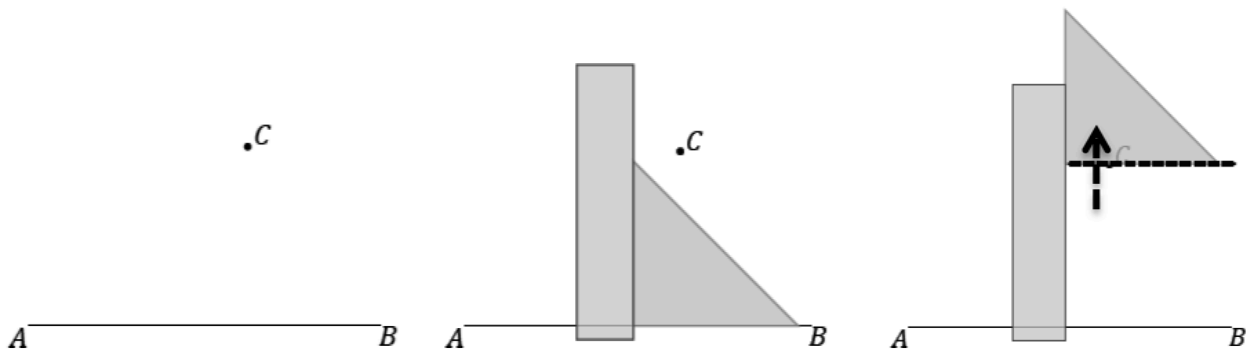
Name _____ Per _____

LO: I can use the parallel method to create scale drawings and can verify that a drawing is to scale by showing that lengths are proportional and angles are congruent.

(1) Drawing parallel using a ruler and set square (or any square)

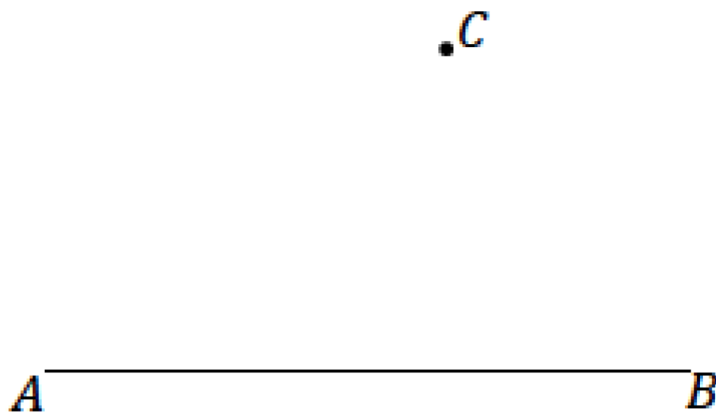
ruler, setsquare

(a) Saun used a ruler (the rectangle) and a setsquare (the triangle) to draw a line through C parallel to AB.



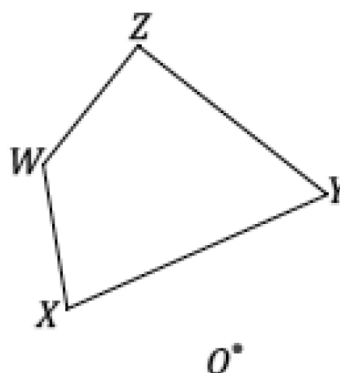
What ensures that the line Saun drew is parallel to AB?

(b) Arielle was drawing parallelogram ABCD when her work was interrupted. Use a ruler and setsquare to finish drawing the parallelogram that she started



(3) Scale drawings using the parallel methodruler,
setsquare

With a ruler and setsquare, use the parallel method to create a scale drawing of $WXYZ$ by the parallel method. W' has already been located for you.

 W' 

Determine the scale factor of the scale drawing. _____

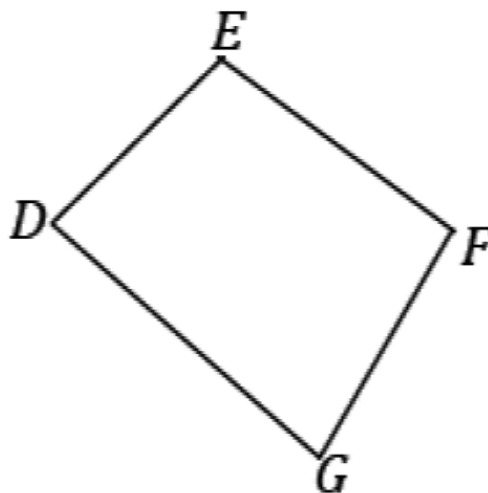
Verify that the resulting figure is in fact a scale drawing by showing that corresponding side lengths are in constant proportion and that corresponding angles are equal in measurement. (Describe or show on the diagram.)

(4) **Scale drawings using the parallel method**

ruler,
setsquare

With a ruler and setsquare, use the parallel method to create a scale drawing of $DEFG$ with center O and scale factor $r = \frac{1}{2}$.

O°



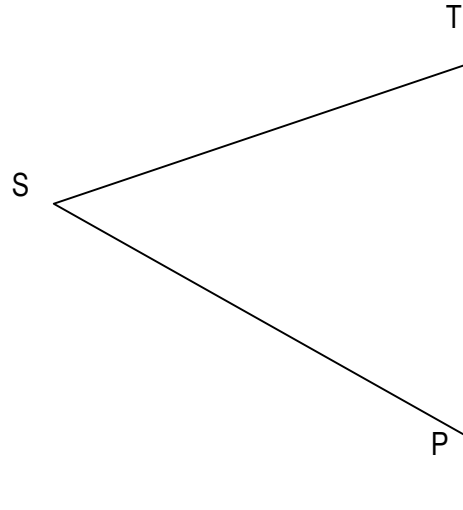
Verify that the resulting figure is in fact a scale drawing by showing that corresponding side lengths are in constant proportion and that corresponding angles are equal in measurement. (Describe or show on the diagram.)

(5)
ruler,
setsquare

Exit Ticket

Trace point O and triangle STP onto your paper and use a ruler and setsquare to make a scale drawing of triangle STP with center O and scale factor $r = \frac{1}{2}$ and label it S'T'P'. Verify that the resulting figure is in fact a scale drawing by showing that corresponding side lengths are in constant proportion and that corresponding angles are equal in measurement. (Describe or show on the diagram.)

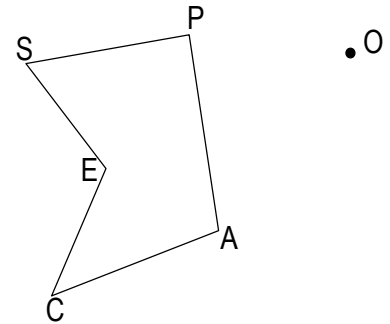
(1)



(6)
compass,
straightedge

Homework: FINISH CLASS WORK AND . . .

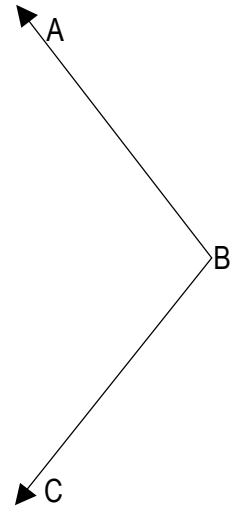
(1) Use the parallel method to create a scale drawing of SPACE with center O and scale factor $r = 3$ and label the drawing S'P'A'C'E'



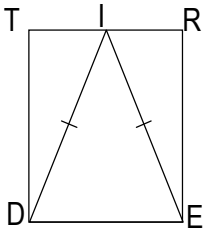
Verify that the resulting figure is in fact a scale drawing by showing that corresponding side lengths are in constant proportion and that corresponding angles are equal in measurement. (Describe or show on the diagram.)

(6) Homework
cont.

- (2) Construct a copy of angle ABC and label it angle DEF. Construct the angle bisector of angle DEF.



- (3) Robert says that $\angle IDE$ and $\angle EID$ are the base angles of an isosceles triangle. What is wrong with his statement?



- (4) Prove that triangle DNG is congruent to triangle ONI.

given:

$$\angle NIO \cong \angle NGD$$

$$\overline{NO} \cong \overline{ND}$$

