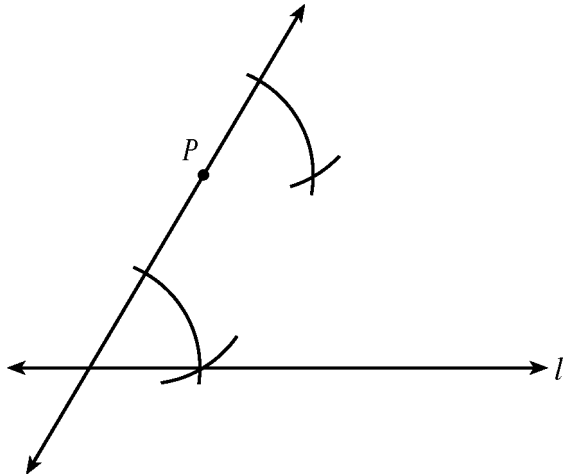


Quiz: Constructions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Marsha is using a straightedge and compass to do the construction shown below.

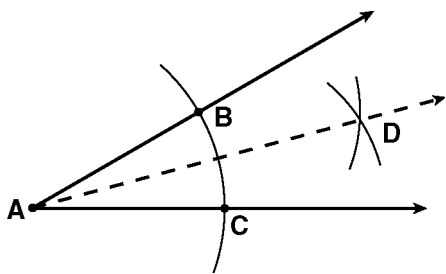


Which *best* describes the construction Marsha is doing?

- A. a line through  $P$  parallel to line  $l$
- B. a line through  $P$  intersecting line  $l$
- C. a line through  $P$  congruent to line  $l$
- D. a line through  $P$  perpendicular to line  $l$

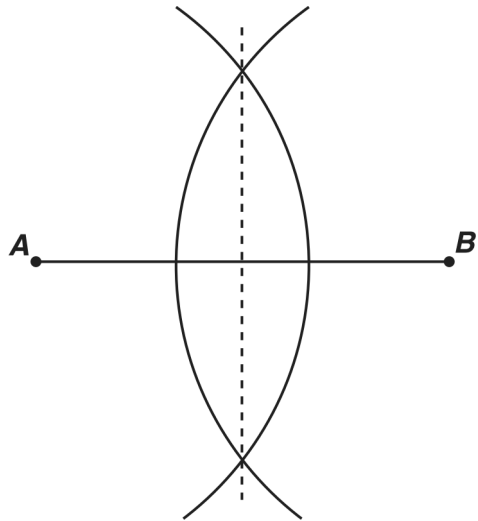
2. Given: angle  $A$

What is the first step in constructing the angle bisector of angle  $A$ ?



- A. Draw ray  $\overrightarrow{AD}$ .
- B. Draw a line segment connecting points  $B$  and  $C$ .
- C. From points  $B$  and  $C$ , draw equal arcs that intersect at  $D$ .
- D. From point  $A$ , draw an arc that intersects the sides of the angle at points  $B$  and  $C$ .

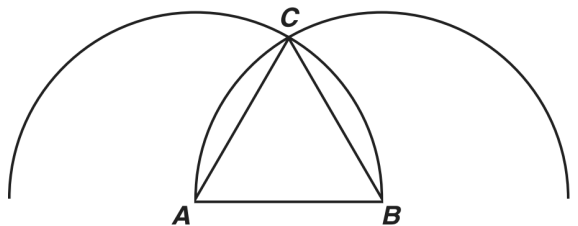
3. What geometric construction is shown in the diagram below?



- A. an angle bisector
- B. a line parallel to a given line
- C. an angle congruent to a given angle
- D. a perpendicular bisector of a segment

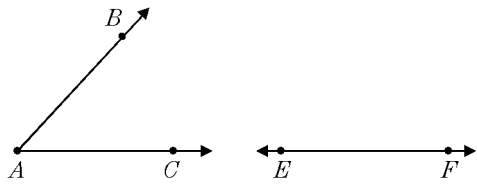
4. Which triangle can be constructed using the following steps?

- 1) Put the tip of the compass on point  $A$ .
- 2) Open the compass so that the pencil tip is on point  $B$ .
- 3) Draw an arc above  $\overline{AB}$ .
- 4) Without changing the opening, put the metal tip on point  $B$  and draw an arc intersecting the first arc at point  $C$ .
- 5) Draw  $\overline{AC}$  and  $\overline{BC}$ .

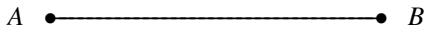


- A. right
- B. obtuse
- C. scalene
- D. equilateral

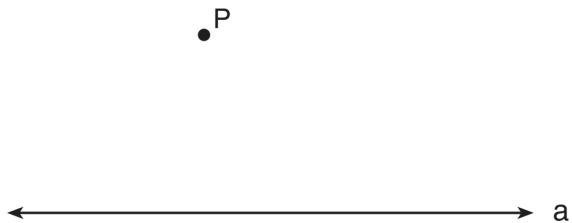
5. Construct an angle congruent to  $\angle ABC$  using segment  $EF$ .



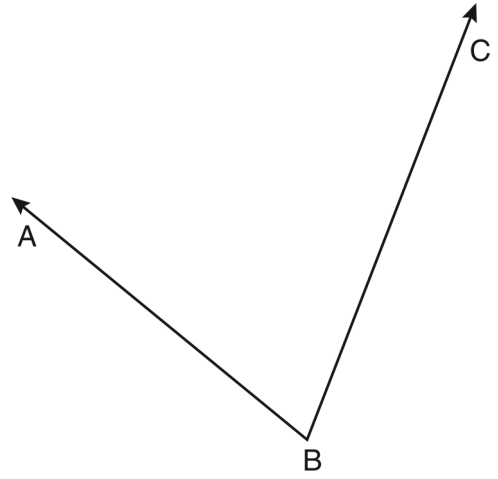
6. Bisect the line segment  $\overline{AB}$ .



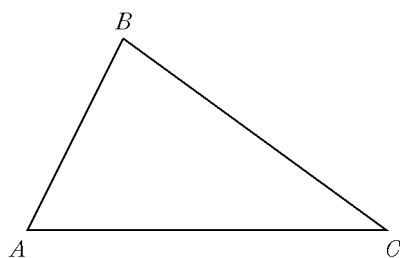
7. On the diagram below, construct a line through point  $P$  perpendicular to line  $a$ .



8. Using a compass and straightedge, construct the angle bisector of  $\angle ABC$  shown below. [Leave all construction marks.]



9. Construct the angle bisector of  $\angle C$  of  $\triangle ABC$ .



Quiz: Constructions 10/16/2013

1.  
Answer: A
2.  
Answer: D
3.  
Answer: D
4.  
Answer: D
5.  
Answer: [construction]
6.  
Answer: [construction]  
Objective: G.CO.12
7.  
Answer: [construction]
8.  
Answer: [task]
9.  
Answer: [construction]