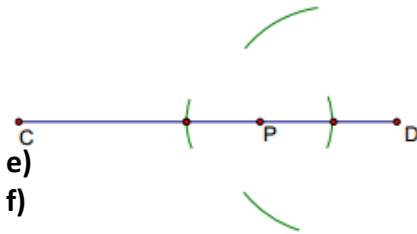
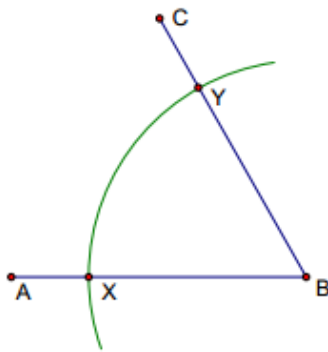


1) James is working on the following construction with his compass and straightedge. What is he constructing?



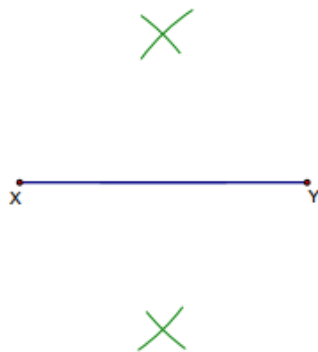
- a) A line parallel to a given line.
- b) A perpendicular to a line from a point not on the line.
- c) A perpendicular bisector of a segment.
- d) A perpendicular to a line from a point on the line.

2) Amanda is constructing an angle bisector. What is her next step?



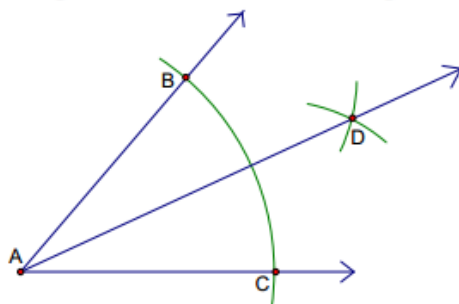
- a) Draw \overline{XY} .
- b) Place the center of her compass on X and construct an arc in the interior of $\angle ABC$. Repeat from Y.
- c) Place the center of her compass on X and construct an arc intersecting A. Repeat on Y, with the arc intersecting C.
- d) Place the center of her compass on A and construct an arc in the interior on $\angle ABC$. Repeat on C.

3) Marvin is working on the following construction with his compass and straightedge. What is he constructing?



- a) An angle bisector.
- b) An angle congruent to a given angle.
- c) A line parallel to a given line.
- d) A perpendicular bisector of a segment.

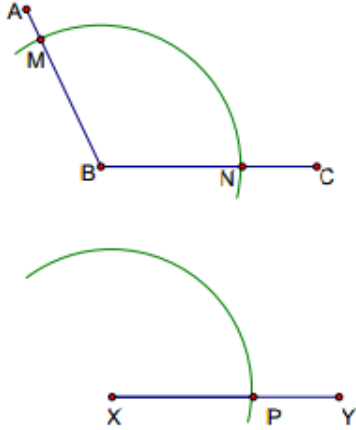
4) Marcus just constructed an angle bisector of angle A. What was his first step?



- a) Draw \overline{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.

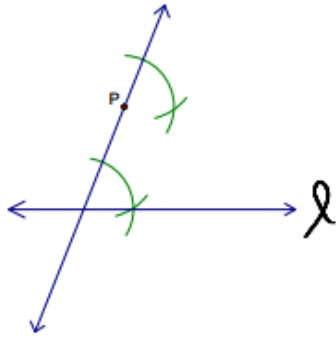


5) Tina is constructing an angle congruent to $\angle ABC$. What is her next step?



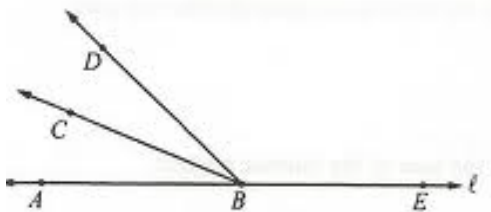
- a) Using MN as the radius, place the center of the compass on P and construct an intersecting arc.
- b) Using MB as the radius, place the center of the compass on P and construct an intersecting arc.
- c) Using MN as the radius, place the center of the compass on Y and construct an intersecting arc.
- d) Using MN as the radius, place the center of the compass on X and construct the intersecting arc.

6) Naomi is working on the following construction with a compass and straightedge. Which best describes the construction that Naomi 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 .

7) In the figure below, \overline{BC} bisects $\angle ABD$, and A, B , and E are all points on line l .



Which angles must be congruent?

- a) $\angle ABC$ and $\angle CBD$
- b) $\angle ABC$ and $\angle CBE$
- c) $\angle ABD$ and $\angle DBE$
- d) $\angle CBD$ and $\angle ABD$

8) Which construction allows you to create a right angle?

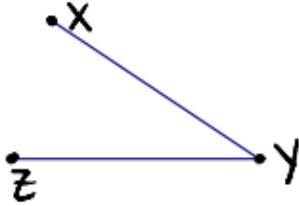
9) Which construction will help you locate the midpoint?

10) Construct a segment congruent to the given segment.





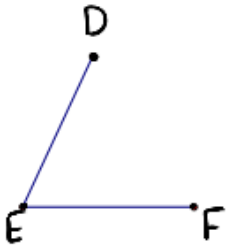
11) Construct an angle congruent to the given angle.



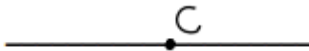
12) Construct a perpendicular bisector of the given segment.



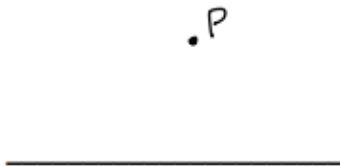
13) Construct the bisector of the given angle.



14) Given a point on a line, construct the perpendicular to the line at the given point.



15) Given a point not on a line, construct the perpendicular to the line from the given point.



16) Given a point outside a line, construct the parallel to the given line through the given point.



17) Describe an alternative way to perform the construction in question 17.