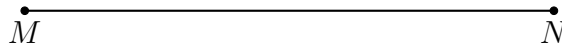


Name:

8.1 Classwork: Construction

1. Complete the construction of an equilateral triangle including the six steps.

- (a) Given the line segment \overline{MN} .
- (b) Construct circle M with radius _____.
- (c) Construct circle _____ with radius _____.
- (d) Label the intersection P of the two circles.
- (e) Draw line segments _____ and _____.
- (f) $\triangle MNP$ is equilateral.



2. Complete the construction of an equilateral triangle including the six steps.

(a) Given the line segment \overline{MN} .

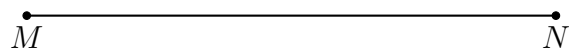
(b)

(c)

(d)

(e)

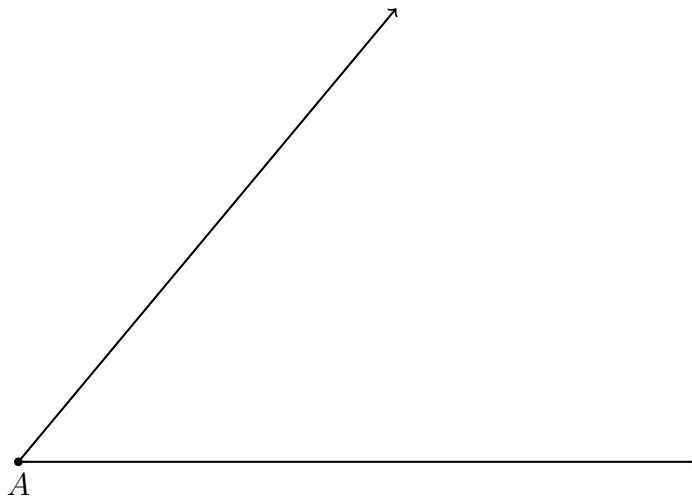
(f) $\triangle MNP$ is equilateral.



Name:

3. Complete the construction of an angle bisector including the six steps.

- (a) Given an angle with vertex A .
- (b) Construct circle A with arbitrary radius (i.e. the radius does not matter).
- (c) Label the intersections B and C of the angle's rays and circle A .
- (d) Construct circle B with radius BC .
- (e) Construct circle _____ with radius _____.
- (f) Label D , the intersection of circle B and C .
- (g) Draw ray _____.
- (h) Ray \overrightarrow{AD} bisects $\angle A$.



4. Complete the construction of a perpendicular bisector including the six steps.

(a) Given the line segment \overline{PQ} .

(b)

(c)

(d)

(e) Draw the line _____.

(f) The line _____ is the perpendicular bisector of \overline{PQ} .

