Name:_____

Date:_____

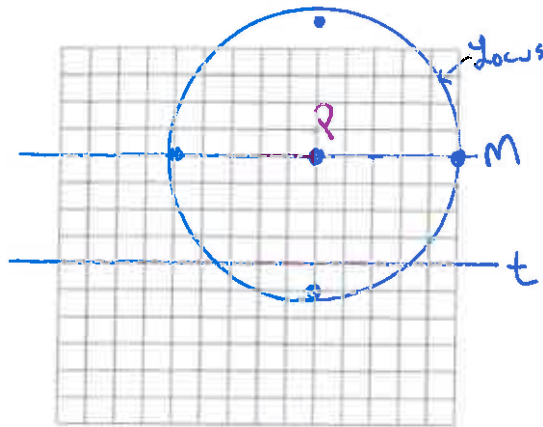# Compound Locus = more than 1 locus at a time.

Lines m and t are parallel and 4 units apart. Point P is on line m.

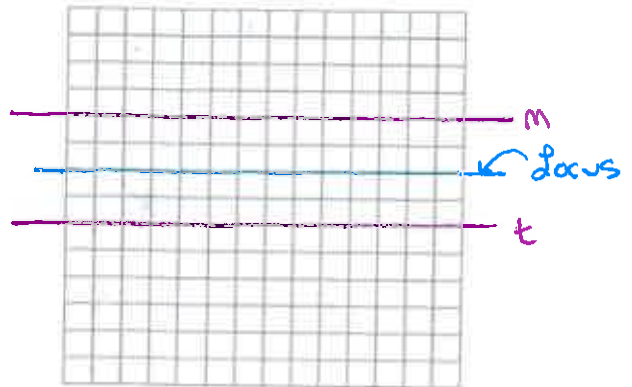Describe the locus of points 5 units from point P.

locus

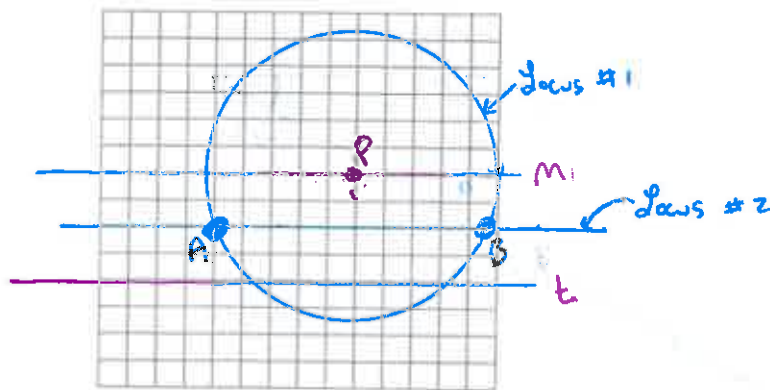Locus is a circle centered at P with a radius of 5.

Describe the locus of points equidistant to lines m & t.

locus

Locus is a line ½ way between lines m and t.

locus #2   locus #1

How many points are equidistant to lines m & t and also 5 units from point P?
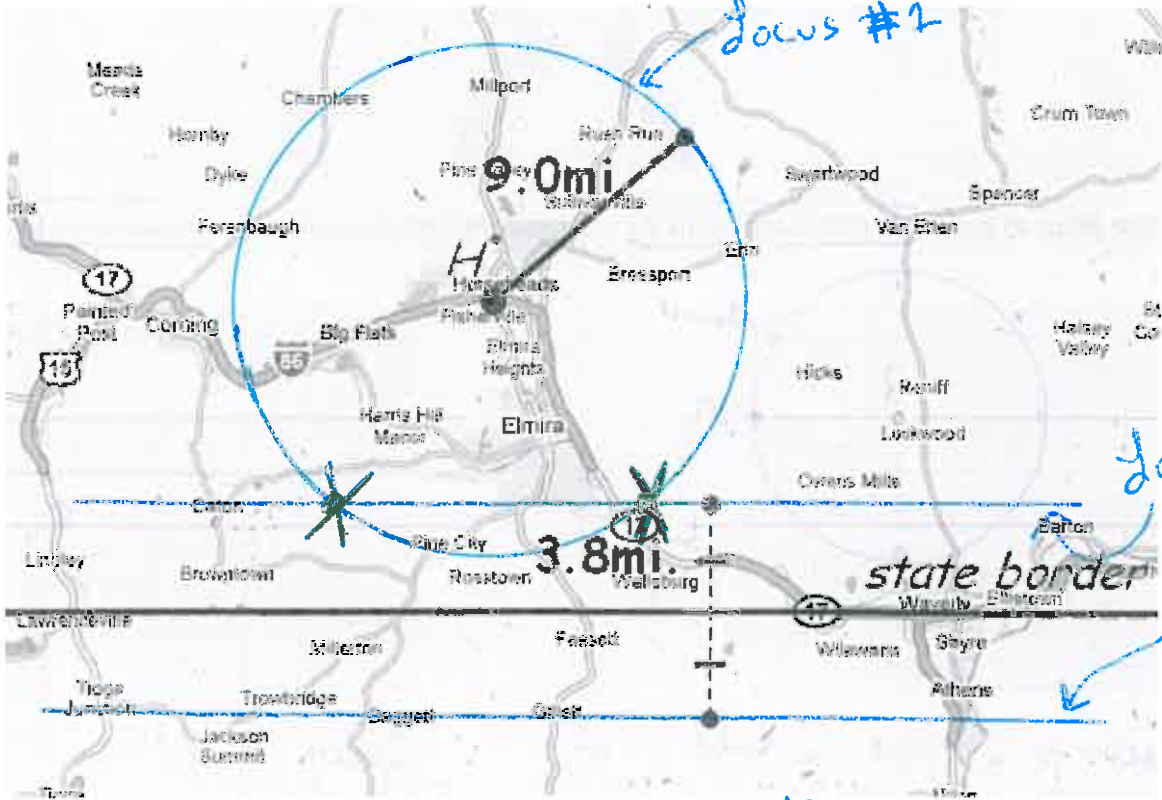
locus #1

locus #2

2 locus.

the locus intersect at 2 points (points A and B)

Example 3: A restaurant will be built 9 miles from Horseheads and also 3.8 miles from the state border. Sketch where the restaurant could be built, by placing an X in each possible location?

Locus #2

9.0mi

3.8mi.

state border

Locus #2

Example 4: A sprinkler head will be installed 50 feet from the pine tree, but equidistant to the golf cart paths. Sketch where the sprinkler head could be installed by placing an X in each possible location.

Pine Tree

Locus #1

Locus #2

50ft.