

1-Draw two Points. Give them names say point A and point B. Find all the points that have the same distance from A and B. (Try to find one such a point first, and see if you can find more.)

2-Draw two points A,B with distance 4 from A to B. Is there any points P that its distance to both A and B is 1?Is there any points P that its distance to both A and B is 2?Is there any points P that its distance to both A and B is 3?

- 3-Draw a point, call it "O". Find all points such that their distance from "O" is
2. (Again, let's try to find one or two such points.)

4-Draw two parallel lines, call them M and N. Try to find all points such that distance from M and N is equal.

5-Draw two lines that cross each other at a point. Find all points that have the same distance to lines M and N.

6-A segment is part of a line, and has two end points.

1-Draw two parallel lines, M and N.

2-Choose point m on M and point n on N.

3-Consider the segment with end points m and n. Find the midpoint of this segment.

4-Now pick new points m and n and do the same steps.

7-Draw a circle of radius 1. Pick a point outside of this circle. Call it point P. Try to draw a line from P such that it crosses the circle at exactly one point Q. We call this line the tangent line.

1-Find the length from P to Q.

2-Find all points outside of the circle such that they give same length as P above.

8-Draw two circles.

1-Find a point M such that any line that passes through M , crosses at least one of the circle.

2-Find a point M , and a line that passes through M , but does not pass through either circle. Find all such points that have such lines.

9-Draw a circle and pick a point on it, call it A.

1-Draw a chord starting from A. Divide in $1/2$ and color the first point you get. Draw more chords and do the same thing. What does the colored picture that you get look like?

2-Again draw chord from A. Divide it in $1/3$ and do the same as part-1.