

Quiz: Locus at a Fixed Distance from a Point

1.	A street light Y is 100 feet from another streetlight Z. Lightening range of Y is 60 feet and that of Z is 50 feet. Draw a diagram showing the areas where each light lightens. Is any area enlightened by both of the lights?
2.	A firecracker has an exploding range of 15 feet. Describe the locus of points that represents the outer edge of the exploding range.
3.	What is the locus of points 15 inches from point G?
4.	What is the equation of the locus of points 40 units from the origin?
5.	A's cat house is 90 feet from B's doghouse. B's dog's leash extends 50 feet from his doghouse and A's leash extends 30 feet from her house. Can the cat be caught by the dog?
6.	A lighthouse is located at the coordinates (12, 8) on a coordinate grid. Its lightening range extends for 80 feet. Write the equation of the locus that represents the outer edge of the lightening area.
7.	What is the equation of the locus of points 14 units from the origin?
8.	What is the locus of points 11 inches from point W?
9.	What is the locus of points 20 inches from point L?
10.	The loudspeaker has a broadcasting range of 54 feet. Describe the locus of points that represents the outer edge of the broadcasting range.

Circle # Correct	0	1	2	3	4	5	6	7	8	9	10
Percentage Score	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%