

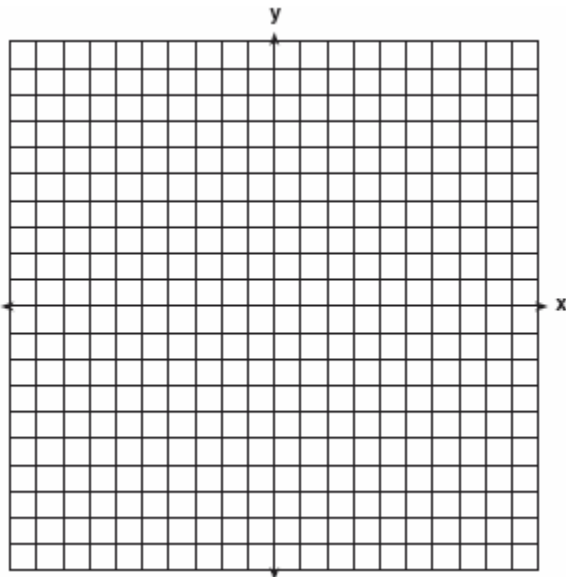
1. 010830a

The locus of points equidistant from the points $(4,-5)$ and $(4,7)$ is the line whose equation is

- [A] $y = 1$ [B] $x = 4$
 [C] $x = 1$ [D] $y = 2$

2. 080634a

Dan is sketching a map of the location of his house and his friend Matthew's house on a set of coordinate axes. Dan locates his house at point $D(0,0)$ and locates Matthews house, which is 6 miles east of Dan's house, at point $M(6,0)$. On the accompanying set of coordinate axes, graph the locus of points equidistant from the two houses. Then write the equation of the locus.



3. 060619a

Chantrice is pulling a wagon along a smooth, horizontal street. The path of the center of one of the wagon wheels is best described as

- [A] a circle [B] a line parallel to the road
 [C] two parallel lines
 [D] a line perpendicular to the road

4. 080512a

Which equation represents the locus of all points 5 units below the x -axis?

- [A] $x = -5$ [B] $x = 5$
 [C] $y = -5$ [D] $y = 5$

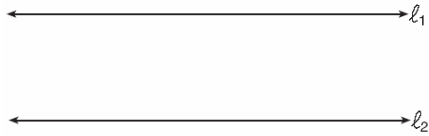
5. 080426a

Which equation represents the locus of points 4 units from the origin?

- [A] $x^2 + y^2 = 16$ [B] $x^2 + y^2 = 4$
 [C] $x = 4$ [D] $x + y = 16$

6. 010409a

In the accompanying diagram, line ℓ_1 is parallel to line ℓ_2 .



Which term describes the locus of all points that are equidistant from line ℓ_1 and ℓ_2 ?

- [A] circle [B] point
[C] line [D] rectangle

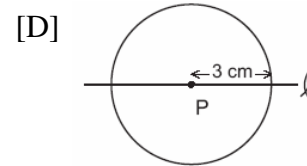
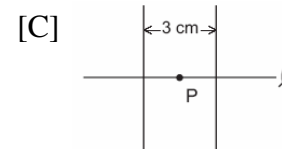
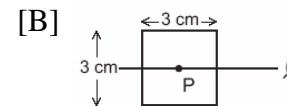
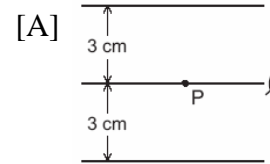
7. 010317a

The locus of points equidistant from two sides of an acute scalene triangle is

- [A] an angle bisector [B] the third side
[C] an altitude [D] a median

8. 060212a

If point P lies on line ℓ , which diagram represents the locus of points 3 centimeters from point P ?



[1] A _____

[2] The points D and M are plotted, the graph of the line $x = 3$ is drawn, and its equation is stated.

[1] One graphing error is made, but an appropriate equation is stated for the locus of points.

or [1] A correct graph is drawn, but the equation is not stated or is stated incorrectly.

or [1] $x = 3$, but no graph is drawn.

[0] A zero response is completely incorrect, irrelevant, or incoherent or is a correct response that was obtained by an obviously

[2] incorrect procedure. _____

[3] B _____

[4] C _____

[5] A _____

[6] C _____

[7] A _____

[8] D _____