

1

In the xy coordinate plane, line L and line K intersect at the point $(4,3)$. Is the product of their slopes negative?

- (1) The product of the x -intercepts of lines L and K is positive.
- (2) The product of the y -intercepts of lines L and K is negative.

2

Lines n and p lie in the xy -plane. Is the slope of line n less than the slope of line p ?

- (1) Lines n and p intersect at the point $(5, 1)$.
- (2) The y -intercept of line n is greater than the y -intercept of line p .

3

Circle C is in the xy -plane, what is the area of the circle?

- (1) Points $(-2, 0)$ and $(0,2)$ lie on the circle.
- (2) The radius of the circle is equal to or less than $2^{1/2}$.

4

In the xy -plane, a parabola intersects with axis- y at point $(0,y)$. Is $y < 0$?

- (1) The vertex of parabola is $(2,-5)$
- (2) The parabola intersects with axis- x at point $(-2,0)$ and $(6,0)$

5

Line m passes through the origin. Line l is parallel to line m . What are the equations of the two lines?

- (1) The horizontal distance between the two lines is 5 units.
- (2) Line l has a y -intercept of 2.5