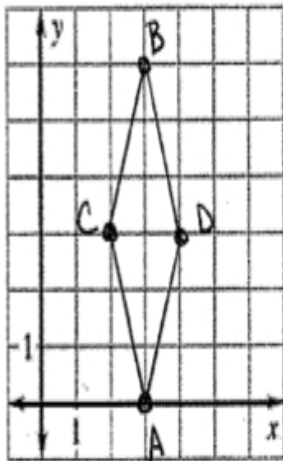


25. The vertices of a figure are given below. Plot and connect the points so that they form a convex polygon. Classify the figure. Then show that the figure is equilateral using algebra.

$A(3, 0)$ ,  $B(3, 6)$ ,  $C(2, 3)$ ,  $D(4, 3)$



$$\begin{aligned}
 *BC &= \sqrt{(3-2)^2 + (6-3)^2} & *CA &= \sqrt{(2-3)^2 + (3-0)^2} \\
 &= \sqrt{(1)^2 + (3)^2} & &= \sqrt{(-1)^2 + (3)^2} \\
 &= \sqrt{1+9} & &= \sqrt{1+9} \\
 &= \sqrt{10} & &= \sqrt{10}
 \end{aligned}$$

$$\begin{aligned}
 *AD &= \sqrt{(3-4)^2 + (0-3)^2} & *DB &= \sqrt{(4-3)^2 + (3-6)^2} \\
 &= \sqrt{(-1)^2 + (-3)^2} & &= \sqrt{(1)^2 + (-3)^2} \\
 &= \sqrt{1+9} & &= \sqrt{1+9} \\
 &= \sqrt{10} & &= \sqrt{10}
 \end{aligned}$$

Quadrilateral