

Problem of the Week Problem E

No Parabolema to Find the Area!

A parabola intersects the y-axis at B(0,5), and intersects the x-axis at C(5,0) and at A(r,0), where 0 < r < 5. The area of $\triangle ABC$ is 5 units².

If D(p,q) is the vertex of the parabola, then determine the area of $\triangle DBC$.

