



Problem of the Week

Problem E

Parabolic Art

Kenna likes making artistic creations using parabolas, to put on the walls of her math classroom. She drew a parabola with vertex $E(7, 9)$ and plotted points $A(9, 8)$ and $B(3, b)$ on the parabola as well as points C and D where the parabola intersects the x -axis, with C to the left of D . Then she connected points A , B , C , and D to form quadrilateral $ABCD$, and painted it blue. What is the area of quadrilateral $ABCD$?

