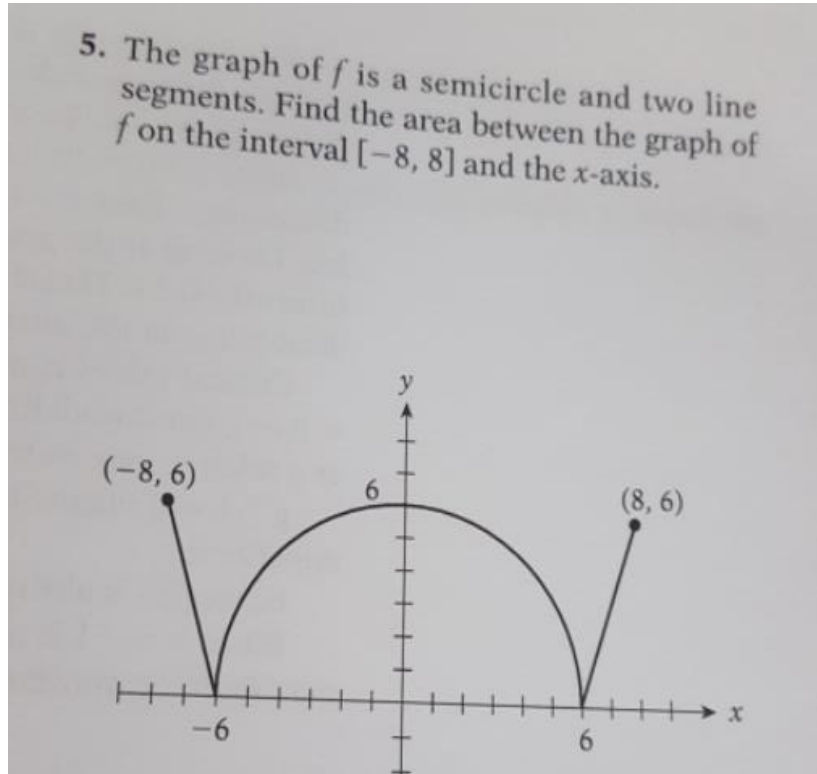


POW#30: for Pre-calc and Calc AB.

5. The graph of f is a semicircle and two line segments. Find the area between the graph of f on the interval $[-8, 8]$ and the x -axis.



AMSCO's AP Calc Book page 151 problem #5

Part 1: Using geometry

Solve the problem above using geometry skills: i.e Area of 2- triangles and Area of semi-circle.

Part 2: Using integration and odd and even function properties.

- Write the piecewise function that represent f .
- If f even or odd? Justify your answer.
- Find the area under between f and the x -axis using antiderivatives and your answer from part b.

<http://online.math.uh.edu/HoustonACT/videocalculus/index.html>

Watch Videos and make notes: 38, 39, *31, 1, 2, 5, 15, 17, 19, 21, and 22.