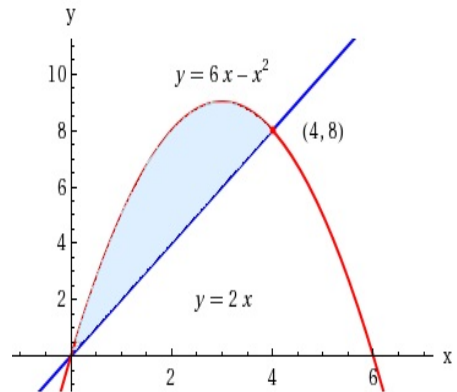


DIRECTIONS To receive full credit, you must provide complete legible solutions to the following problems in the space provided. Transfer all your answers to the space provided on the test paper. A set up includes a graph of the region, choice of a differential strip and an expression for the differential including limits.

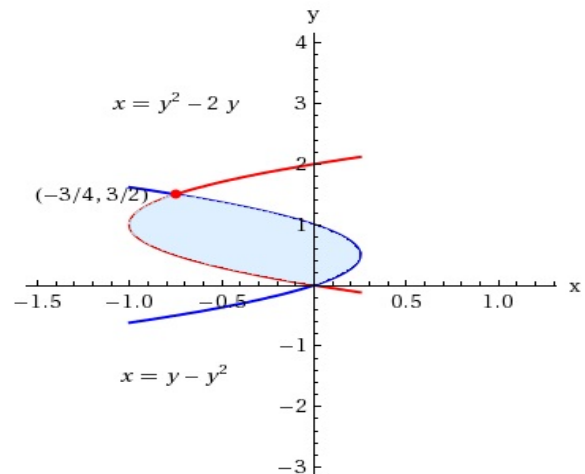
1. Set up an integral for the area of the region bounded by the curves, then find the exact value of the area.

Ans _____

$$y = 6x - x^2, y = 2x$$



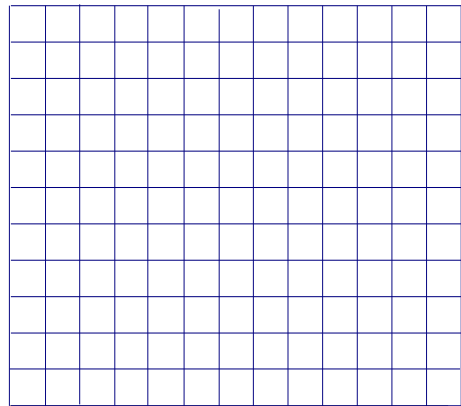
2. Set up an integral for the area of the region bounded by the curves, then find the exact value of the area.



3. Set up an integral for the area of the region bounded by the curves, then find the exact value of the area.

$$x = 5y^2, x = 2 + 3y^2$$

Ans _____



4. Set up an integral for the area of the region bounded by the curves, then find the exact value of the area.

$$y = 3 \cos(3x), y = 3 - 3 \cos(3x), 0 \leq x \leq \pi / 3$$

Ans _____

