AP Calculus
Ricketts

PRACTICE PROBLEM SET

Name: _____

Find the area of the region between the two curves in each problem. Provide a sketch for each and solve all analytically.

1. The curve $y = x^2 - 2$ and the line $y = 2$.

2. The curve $y = x^2$ and the curve $y = 4x - x^2$.

3. The curve $y = x^3$ and the curve $y = 3x^2 - 4$.

4. The curve $y = x^2 - 4x - 5$ and the curve $y = 2x - 5$.

5. The curve $y = x^3$ and the *x-axis* from $x = -1$ to $x = 2$.

6. The curve $x = y^2$ and the line $x = y + 2$.

7. The curve $x = y^2$ and the curve $x = 3 - 2y^2$.

8. The curve $x = y^3 - y^2$ and the line $x = 2y$.

9. The curve $x = y^2 - 4y + 2$ and the line $x = y - 2$.

10. The curve $x = y^3$ and the curve $x = 2 - y^4$.