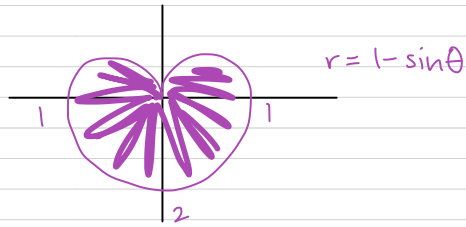


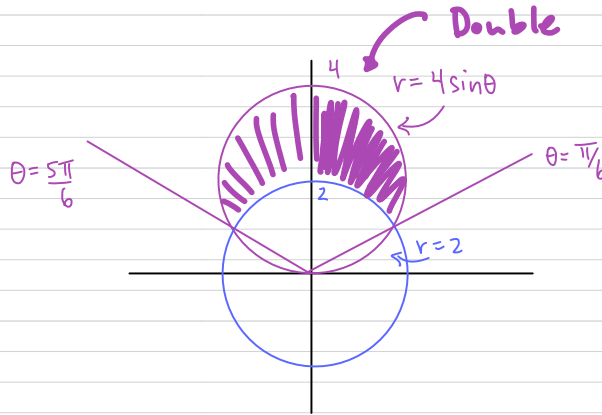
HW #20 Final Answers

1. Area = $\frac{3\pi}{2}$



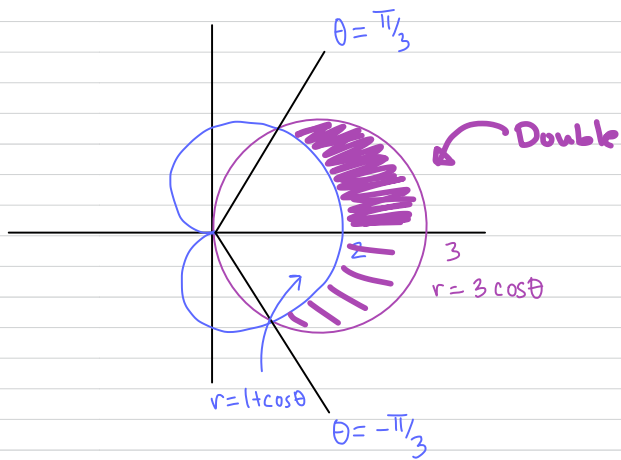
2. Use Symmetry

3. Area = $\frac{4\pi}{3} + 2\sqrt{3}$



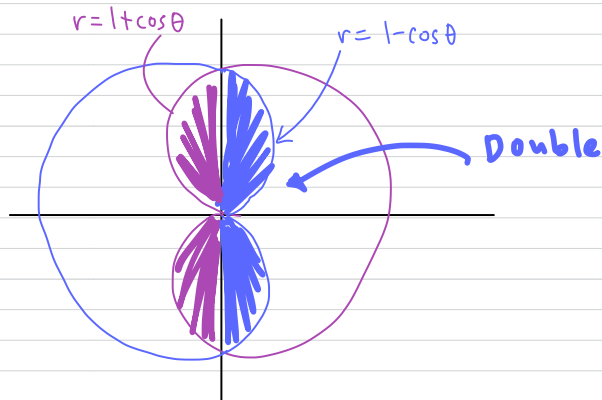
4. Use Symmetry

5. Area = π



6. Use Symmetry

7. Area = $\frac{3\pi}{2} - 4$

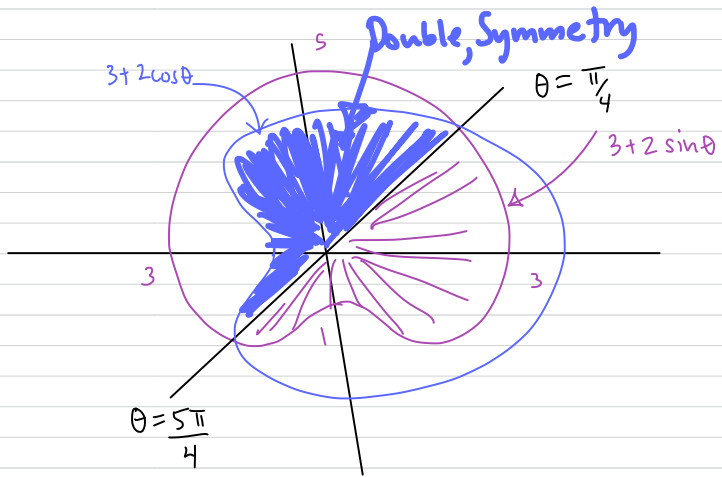


8. Use Symmetry

9.

$$11\pi - 12\sqrt{2}$$

10. Use Symmetry



11.

$$-\infty$$

Diverges

12.

$$\frac{8\pi}{3\sqrt{3}}$$

Converges