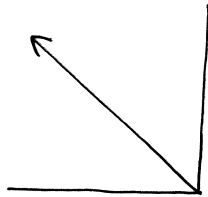
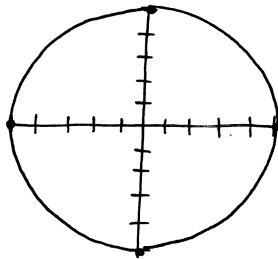


Polar Packet: Section 7.2: 1-31 odd

1. $\theta = 135^\circ$

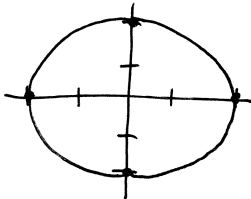


3. $r = 5$



$$r^2 = 25$$
$$x^2 + y^2 = 25$$

5. $r = -2$

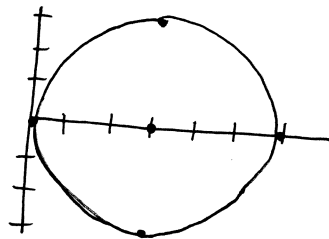


$$r^2 = 4$$
$$x^2 + y^2 = 4$$

7. $r = 6\cos\theta = 2a\cos\theta$ with $a = 3$

Center: $(3, 0)$

Radius: 3

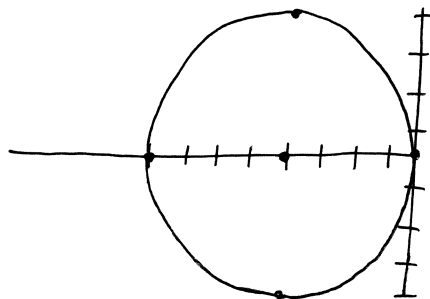


$$(x-3)^2 + y^2 = 9$$

9. $r = -8\cos\theta = 2a\cos\theta$ with $a = -4$

Center: $(-4, 0)$

Radius: -4

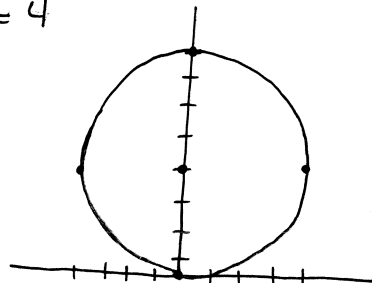


$$(x+4)^2 + y^2 = 16$$

11. $r = 8\sin\theta = 2a\sin\theta$ with $a = 4$

Center: $(0, 4)$

Radius: 4



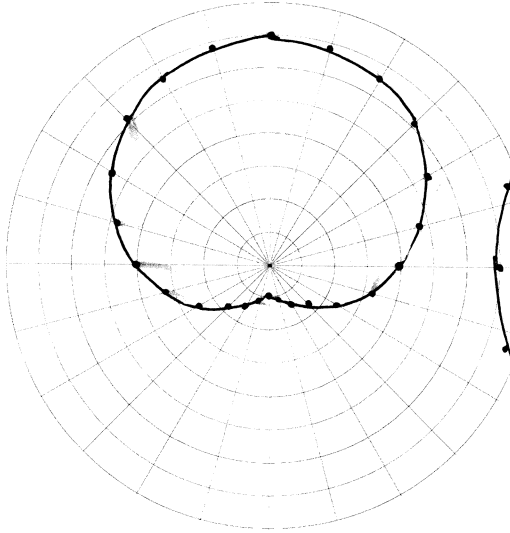
$$x^2 + (y-4)^2 = 16$$

Polar Graph Paper

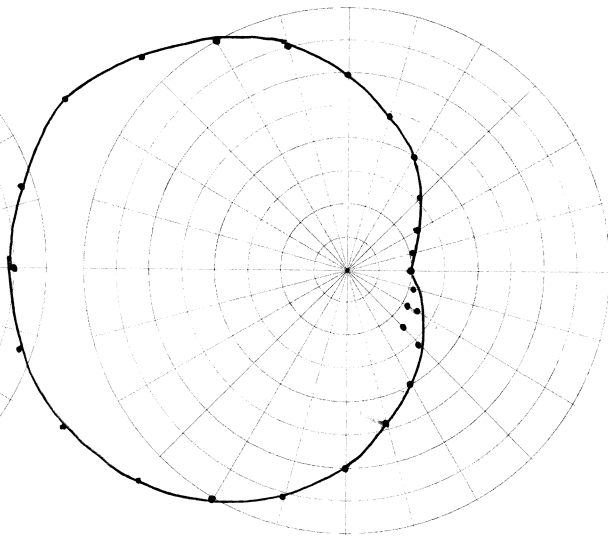
Radial scale divisions: 5 mm

Polar scale divisions: 15°

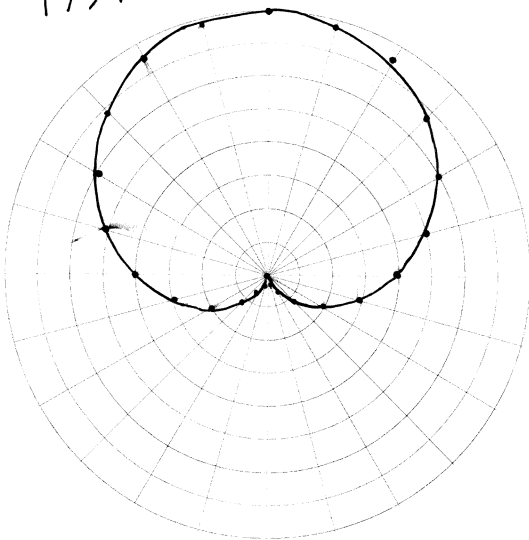
13) $r = 4 + 3\sin\theta$



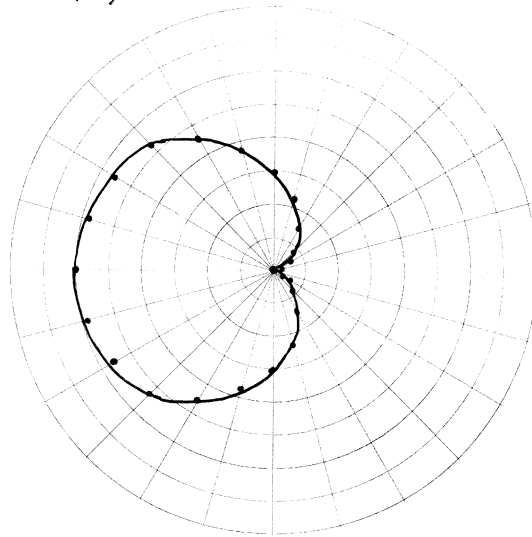
15) $6 - 4\cos\theta = r$



17) $r = 4 + 4\sin\theta$



19) $r = 3 - 3\cos\theta$

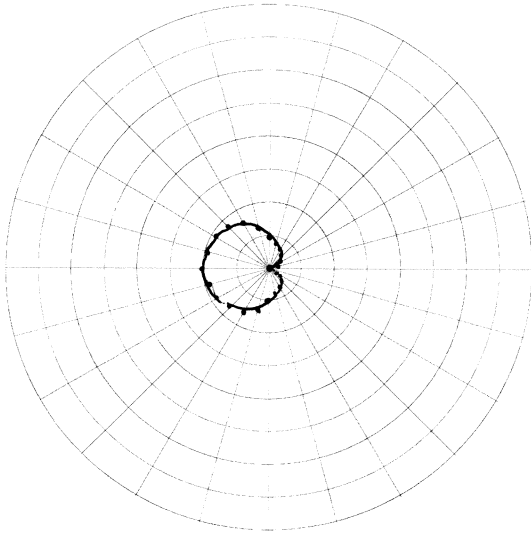


Polar Graph Paper

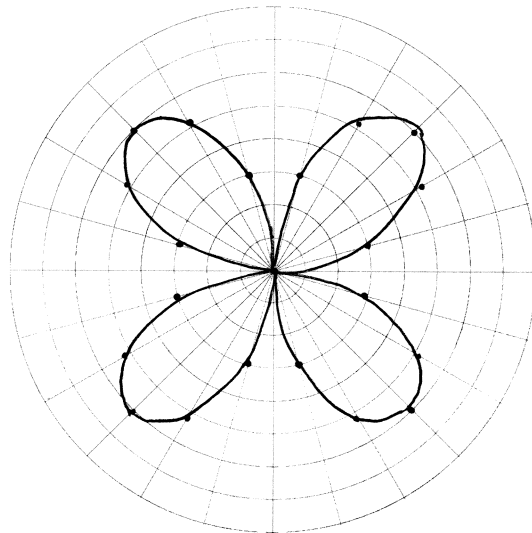
Radial scale divisions: 5 mm

Polar scale divisions: 15°

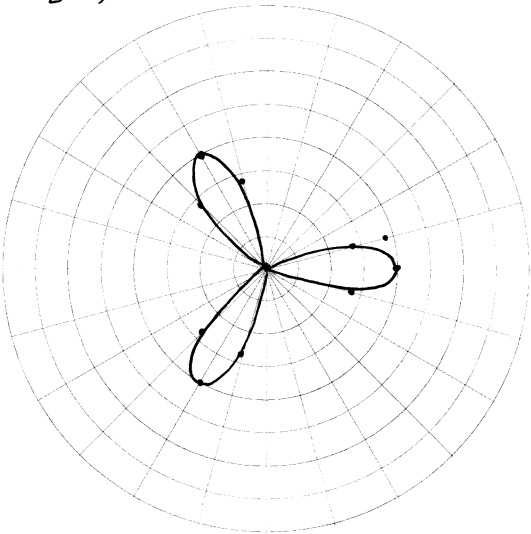
21) $r = 1 - \cos \theta$



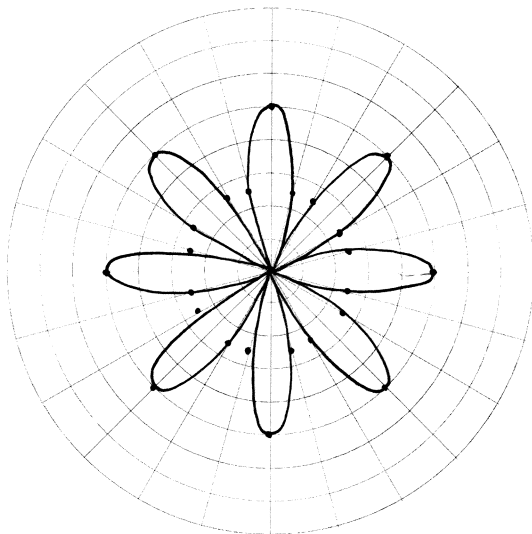
23) $r = 6 \sin 2\theta$



25) $r = 4 \cos 3\theta$



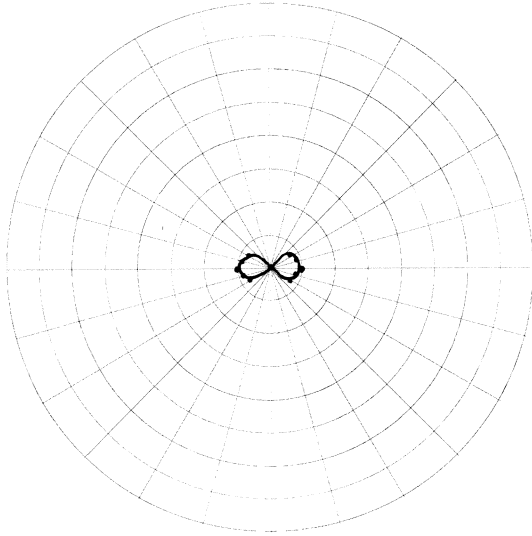
27) $r = 5 \cos 4\theta$



Polar Graph Paper

Radial scale divisions: 5 mm
 Polar scale divisions: 15°

29) $r^2 = \cos 2\theta$
 $r = \sqrt{\cos 2\theta}$



31) $r = \theta$ (better in radians)

