

Summary

$$y = a \cos b(x - c) + d$$

↑
amplitude
radius

↑
period
 $\frac{360^\circ}{b}$

(revolution)

↑
shift
of 'c'
to the right

↑
midline
sinusoidal axis

→ diameter = min to max

→ min = $d - a$

→ max = $d + a$

Range: $\{y \mid \min \leq y \leq \max\}$

Section 8.4

24. B

27. B

33. D

25. A

28. D

34. B

26. D

29. A

35. D

21. C

30. A

36. Amp = 2

midline $\Rightarrow y = -1$ period 120° range $-3 \leq y \leq 1, y \in \mathbb{R}$

22. B

31. C

$$y = 2\cos 3(x) - 1$$

23. B

32. A