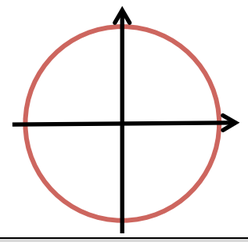
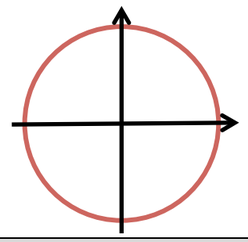
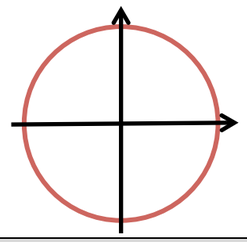
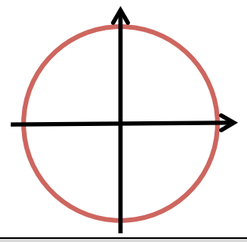
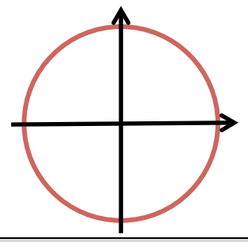
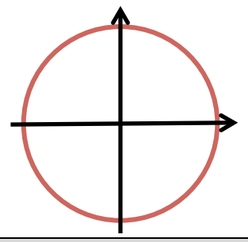
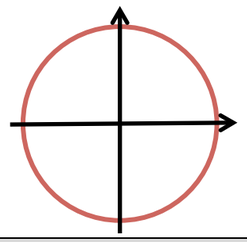
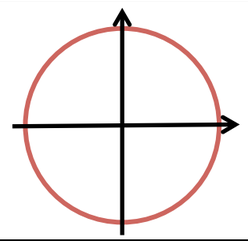
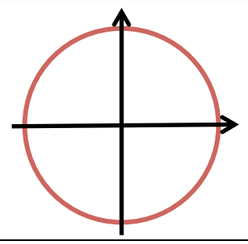
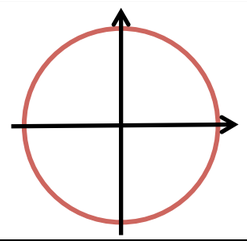
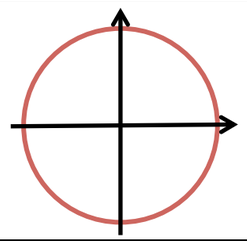
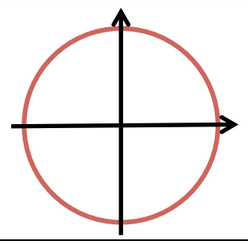
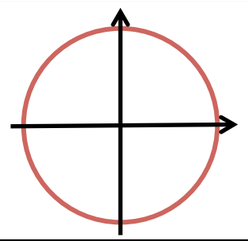
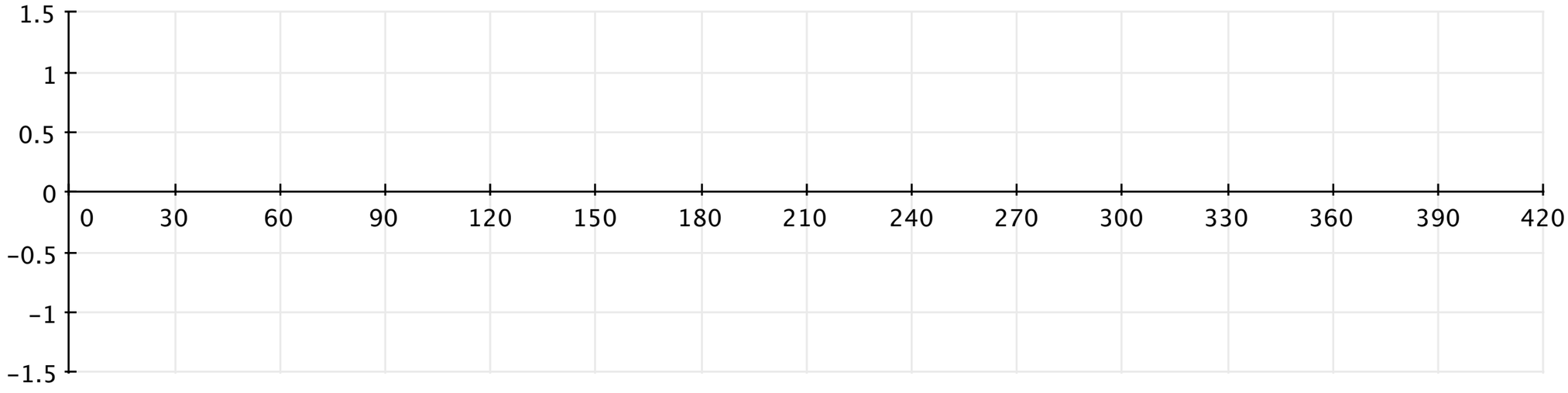
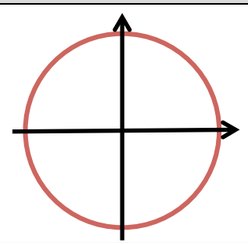
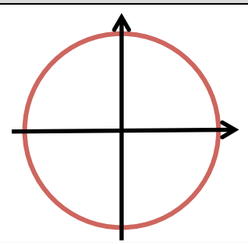
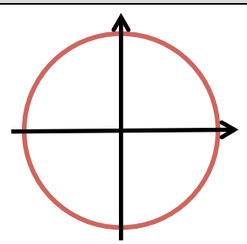
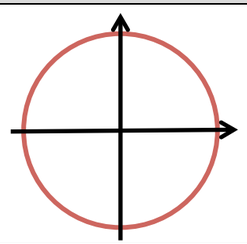
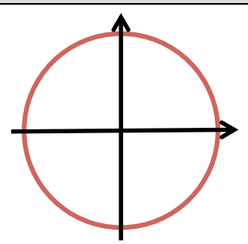
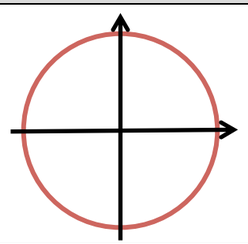
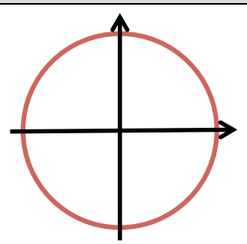
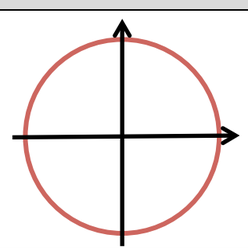
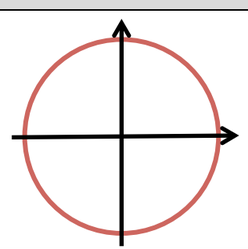
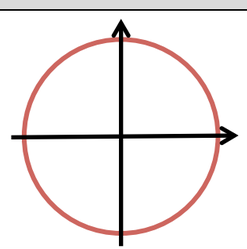
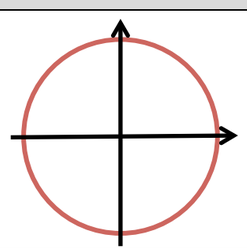
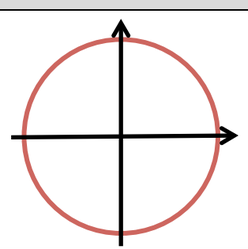
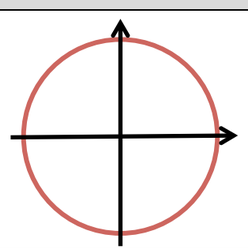
8.2 Exploring the Graphs of Periodic Functions (p.521)

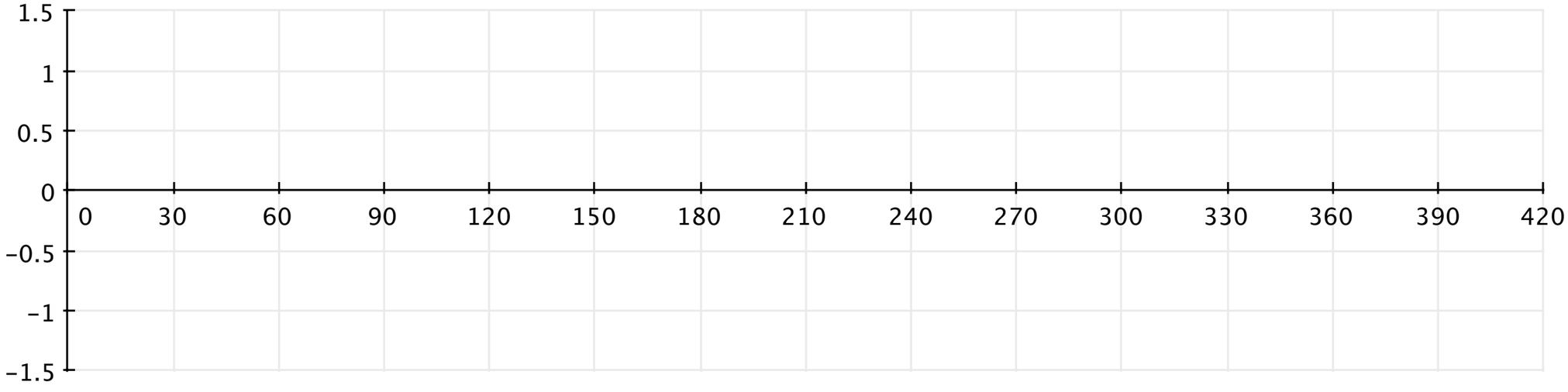
1. Graph $y = sin\theta$, $0° \leq \theta \leq 360°$

0°or _____	30°or _____	60°or _____	90°or _____	120°or _____	150°or _____	180°or _____
						
210°or _____	240°or _____	270°or _____	300°or _____	330°or _____	360°or _____	
						



1. Graph $y = cos\theta$, $0° \leq \theta \leq 360°$

0°or _____	30°or _____	60°or _____	90°or _____	120°or _____	150°or _____	180°or _____
						
210°or _____	240°or _____	270°or _____	300°or _____	330°or _____	360°or _____	
						



F Math 12

8.2 Exploring the Graphs of Periodic Functions p. 521

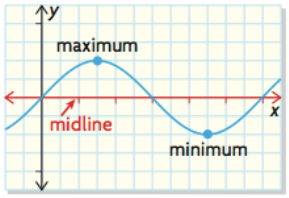
Name _____

Date _____

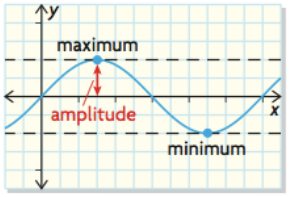
Goal: Investigate the characteristics of the graphs of sine and cosine functions.

1. **periodic function**: A function whose graph repeats in regular intervals or cycles.

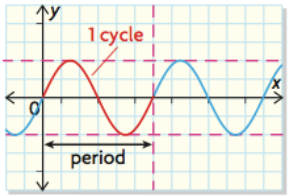
2. **midline**: The horizontal line halfway between the maximum and minimum values of a periodic function.



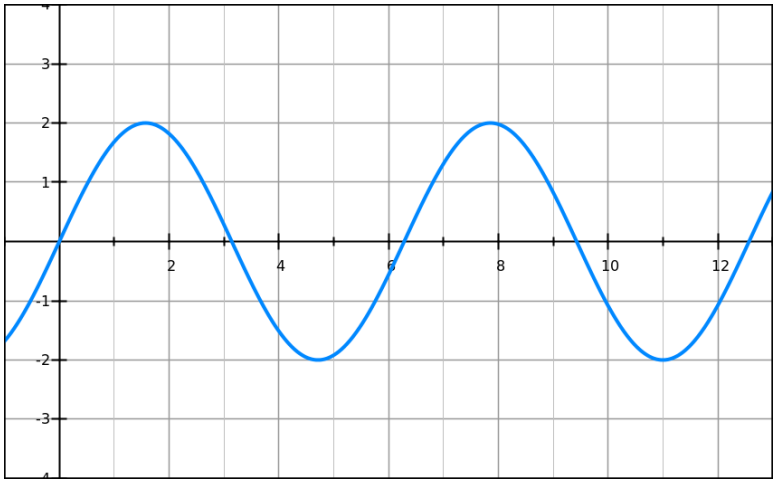
3. **amplitude**: The distance from the midline to either the maximum or minimum value of a periodic function; the amplitude is always expressed as a positive number.

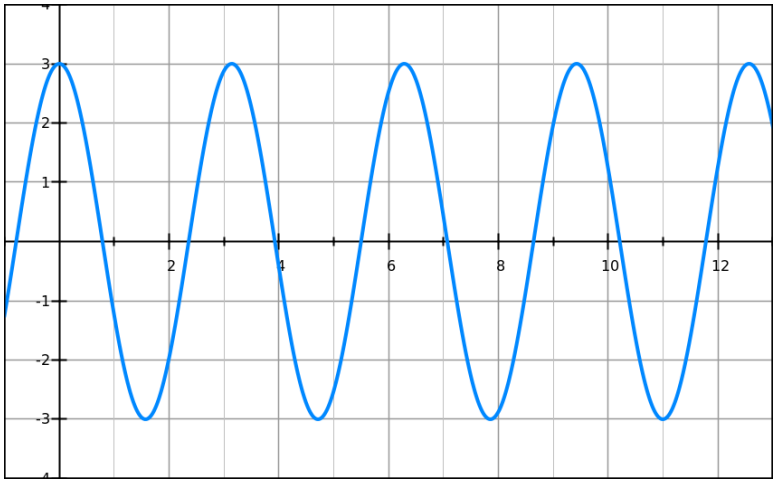


4. **period**: The length of the interval of the domain to complete one cycle.



Example 1: Correctly label the **midline**, **maximum** and **minimum** points, **amplitude** and **period** for the graphs below. State which graph is a **sine** function and which graph is a **cosine** function.





HW: 8.2 pp. 524-525 #1-6