

# 10.1A

Name \_\_\_\_\_ Date \_\_\_\_\_ Period \_\_\_\_\_

SCORE: \_\_\_\_\_

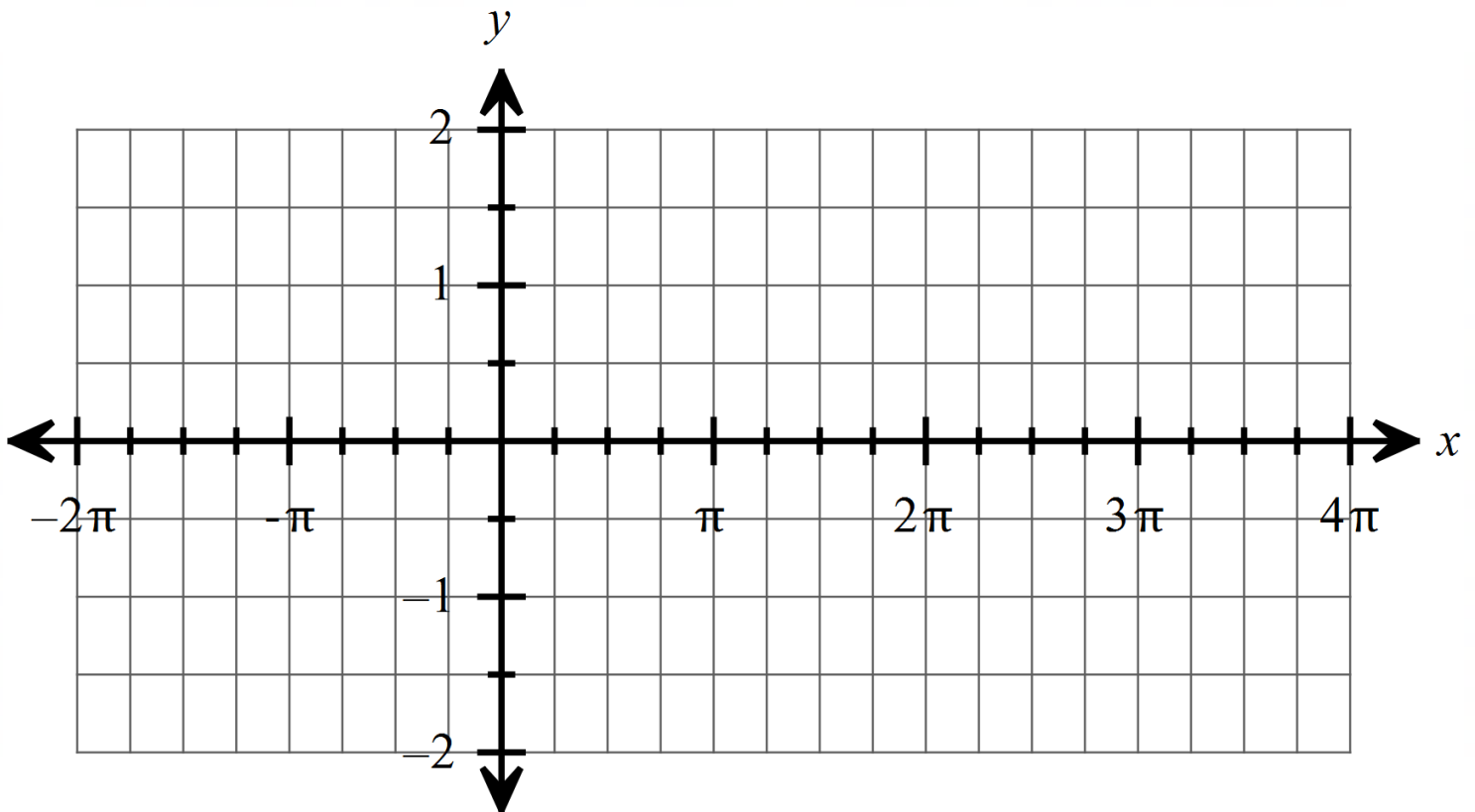
/

## Making a Table for Sine and Cosine

2023-2024

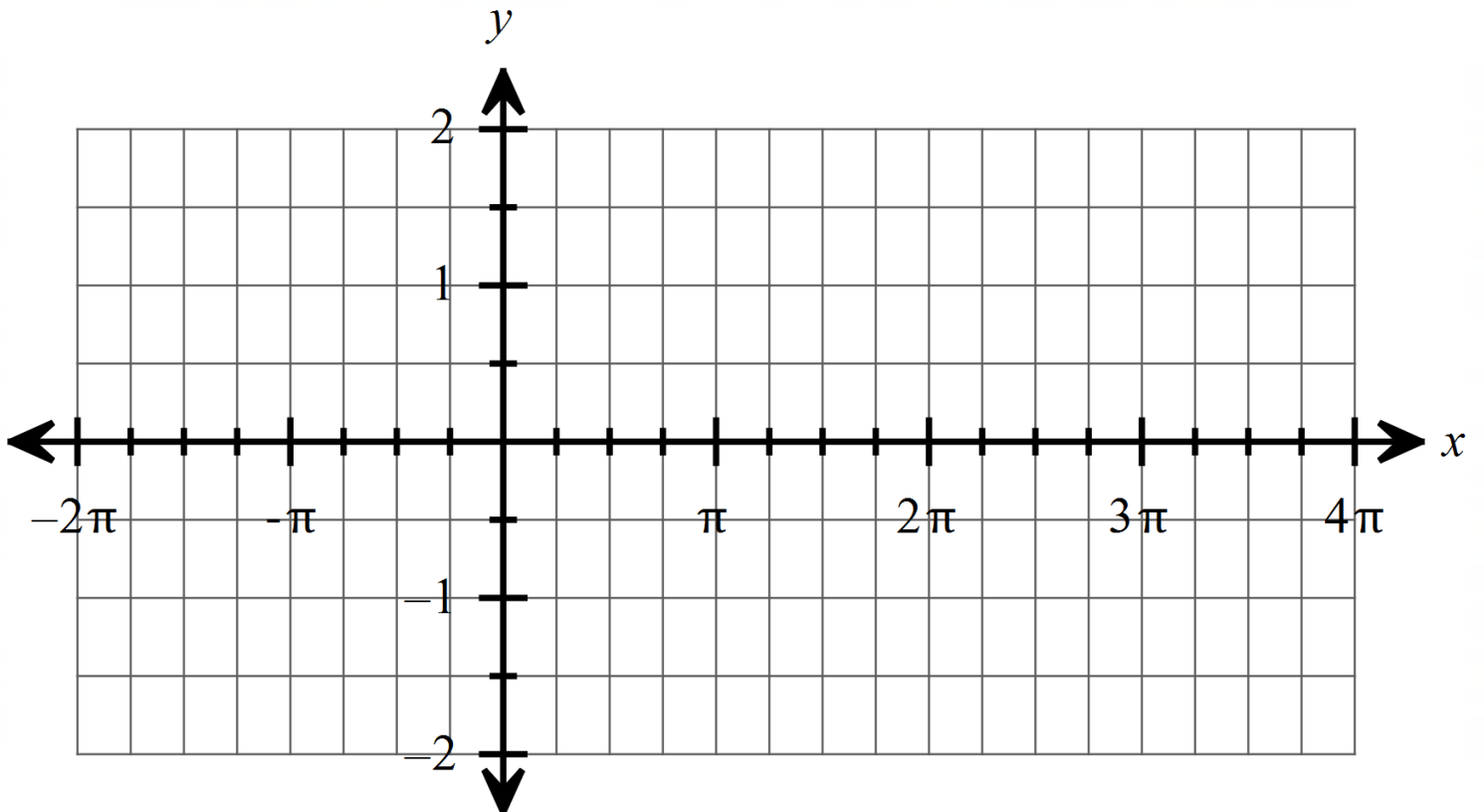
ANGLE ( $\theta$ )	$\sin \theta$
$-2\pi$	
$-\frac{3\pi}{2}$	
$-\pi$	
$-\frac{\pi}{2}$	
0	
$\frac{\pi}{2}$	
$\pi$	
$\frac{3\pi}{2}$	
$2\pi$	
$\frac{5\pi}{2}$	
$3\pi$	
$\frac{7\pi}{2}$	
$4\pi$	

Now that you have the table filled out, use the angles as  $x$  and the  $\sin \theta$  as  $y$  and graph the table.



ANGLE ( $\theta$ )	$\cos \theta$
$-2\pi$	
$-\frac{3\pi}{2}$	
$-\pi$	
$-\frac{\pi}{2}$	
$0$	
$\frac{\pi}{2}$	
$\pi$	
$\frac{3\pi}{2}$	
$2\pi$	
$\frac{5\pi}{2}$	
$3\pi$	
$\frac{7\pi}{2}$	
$4\pi$	

Now that you have the table filled out, use the angles as  $x$  and the  $\cos \theta$  as  $y$  and graph the table.



Answer the following questions using the table or graph.

1. What is the maximum of the sine graph?
2. What is the maximum of the cosine graph?
3. Is there an end behavior for the sine graph? In other words, does it approach the same number on the right or left side of the graph?
4. Is there an end behavior for the cosine graph? In other words, does it approach the same number on the right or left side of the graph?
5. What are the coterminal angles for 0 radians listed in the table for sine?
6. What is the sine of the coterminal angles of 0 radians?
7. What are the coterminal angles for 0 radians listed in the table for cosine?
8. What is the cosine of the coterminal angles 0 radians?
9. What are the coterminal angles for  $\frac{\pi}{2}$  on the sine table?
10. What is the sine of the coterminal angles of  $\frac{\pi}{2}$ ?
11. What are the coterminal angles for  $\frac{\pi}{2}$  on the cosine table?
12. What is the cosine of the coterminal angles of  $\frac{\pi}{2}$ ?
13. What pattern do you notice with the coterminal angles for sine and cosine?
14. What is another pattern you see in the tables for sine and cosine?