

AP Precalculus - Session 1

Daily Assignment (Independent Practice)

Wednesday, January 7, 2026 | DUE: End of Class

Name: _____ Period: _____

Instructions: Show all work. Answers without work may not receive full credit.

Calculator: Allowed for checking, but show exact answers where possible.

PART A: RIGHT TRIANGLE TRIGONOMETRY (15 problems)

Problems 1-10: Find the three trigonometric ratios for angle θ .

#	Opposite	Adjacent	Hypotenuse	$\sin(\theta)$	$\cos(\theta)$	$\tan(\theta)$
1	3	4	5			
2	5	12	13			
3	8	15	17			
4	7	24	25			
5	9	40	41			
6	20	21	29			
7	11	60	61			
8	13	84	85			
9	6	8	10			
10	15	20	25			

Problems 11-15: Given one or two trig values, find the third.

11. If $\sin(\theta) = 3/5$ and $\cos(\theta) = 4/5$, find $\tan(\theta)$. _____

12. If $\sin(\theta) = 5/13$ and $\cos(\theta) = 12/13$, find $\tan(\theta)$. _____

13. If $\sin(\theta) = 8/17$ and $\cos(\theta) = 15/17$, find $\tan(\theta)$. _____

14. If $\sin(\theta) = 7/25$ and $\cos(\theta) = 24/25$, find $\tan(\theta)$. _____

15. If $\sin(\theta) = 9/41$ and $\cos(\theta) = 40/41$, find $\tan(\theta)$. _____

PART B: DEGREE-RADIAN CONVERSIONS (15 problems)

Problems 16-22: Convert from degrees to radians. Leave answers in terms of π .

#	Degrees	Work/Formula	Radians
16	30°		
17	45°		
18	60°		
19	90°		
20	120°		
21	135°		
22	150°		

Problems 23-30: Convert from radians to degrees.

#	Radians	Work/Formula	Degrees
23	$\pi/6$		
24	$\pi/4$		
25	$\pi/3$		
26	$\pi/2$		
27	$2\pi/3$		
28	$3\pi/4$		
29	$5\pi/6$		
30	$7\pi/6$		

BONUS QUESTION (+2 points)

Explain in your own words (3-5 sentences): Why does radian measure make sense mathematically? Why is it considered 'natural'?

Your explanation:

Self-Assessment:

Circle your confidence level with today's material:

1 - Need more help | 2 - Getting it | 3 - Confident | 4 - Could teach someone else