

8-1 Angle and Angle Measure Worksheet

Draw the indicated angle. Make sure to include your direction and spirals if it goes around more than once.

1. $\theta = 310^\circ$	2. $\theta = -125^\circ$	3. $\theta = 510^\circ$	4. $\theta = -700^\circ$	5. $\theta = -1350^\circ$
6. $\theta = \frac{5\pi}{4}$	7. $\theta = -\frac{\pi}{2}$	8. $\theta = \frac{25\pi}{6}$	9. $\theta = -\frac{10\pi}{3}$	10. $\theta = 7\pi$

Complete the chart below about converting angle measures. Show your WORK!

Degree Measure \rightarrow Radian Measure	Radian Measure \rightarrow Degree Measure
11. $\theta = 155^\circ \rightarrow$ _____	14. $\theta = \frac{7\pi}{6} \rightarrow$ _____
12. $\theta = -330^\circ \rightarrow$ _____	15. $\theta = \frac{2\pi}{3} \rightarrow$ _____
13. $\theta = 720^\circ \rightarrow$ _____	16. $\theta = -\frac{26\pi}{15} \rightarrow$ _____

Find a positive and a negative coterminal angle for each given angle. Show work!

17. $114^\circ \rightarrow$ positive coterminal angle = _____ negative coterminal angle = _____
18. $-\frac{4\pi}{9} \rightarrow$ positive coterminal angle = _____ negative coterminal angle = _____

Determine the measure of each angle. Keep units consistent. Must show work!

19.	20.	21.	22.
-----	-----	-----	-----

Determine the reference angle for each given angle θ . Show your work!

23. $\theta = 323^\circ \rightarrow$ reference angle: _____
24. $\theta = 242^\circ \rightarrow$ reference angle: _____
25. $\theta = 127^\circ \rightarrow$ reference angle: _____
26. $\theta = -135^\circ \rightarrow$ reference angle: _____
27. $\theta = 744^\circ \rightarrow$ reference angle: _____
28. $\theta = -566^\circ \rightarrow$ reference angle: _____