

PreCalculus  
Angle Measure WS

Name \_\_\_\_\_

Convert each degree measure to exact radian measure.

$$r = d \cdot \frac{\pi}{180}$$

\* usually left as a fraction

1. $-415^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{83\pi}{36}}$	2. $-519^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{173\pi}{60}}$	3. $570^\circ \cdot \frac{\pi}{180} = \boxed{\frac{19\pi}{6}}$
4. $-174^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{29\pi}{30}}$	5. $473^\circ \cdot \frac{\pi}{180} = \boxed{\frac{473\pi}{180}}$	6. $905^\circ \cdot \frac{\pi}{180} = \boxed{\frac{181\pi}{36}}$
7. $-799^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{799\pi}{180}}$	8. $100^\circ \cdot \frac{\pi}{180} = \boxed{\frac{5\pi}{9}}$	9. $44^\circ \cdot \frac{\pi}{180} = \boxed{\frac{11\pi}{45}}$
10. $401^\circ \cdot \frac{\pi}{180} = \boxed{\frac{401\pi}{180}}$	11. $270^\circ \cdot \frac{\pi}{180} = \boxed{\frac{3\pi}{2}}$	12. $812^\circ \cdot \frac{\pi}{180} = \boxed{\frac{203\pi}{45}}$
13. $-712^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{178\pi}{45}}$	14. $-623^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{623\pi}{180}}$	15. $-332^\circ \cdot \frac{\pi}{180} = \boxed{-\frac{83\pi}{45}}$

Convert each radian measure to degree measure.  $d = r \cdot \frac{180^\circ}{\pi}$

16. $\frac{17\pi}{180} \cdot \frac{180^\circ}{\pi} = \boxed{17^\circ}$	17. $\frac{131\pi}{36} \cdot \frac{180^\circ}{\pi} = \boxed{655^\circ}$	18. $\frac{191\pi}{45} \cdot \frac{180^\circ}{\pi} = \boxed{772^\circ}$
19. $\frac{-71\pi}{90} \cdot \frac{180^\circ}{\pi} = \boxed{-142^\circ}$	20. $\frac{97\pi}{30} \cdot \frac{180^\circ}{\pi} = \boxed{582^\circ}$	21. $\frac{-179\pi}{36} \cdot \frac{180^\circ}{\pi} = \boxed{-895^\circ}$
22. $\frac{55\pi}{12} \cdot \frac{180^\circ}{\pi} = \boxed{825^\circ}$	23. $\frac{-233\pi}{180} \cdot \frac{180^\circ}{\pi} = \boxed{-233^\circ}$	24. $\frac{-5\pi}{18} \cdot \frac{180^\circ}{\pi} = \boxed{-50^\circ}$
25. $\frac{299\pi}{180} \cdot \frac{180^\circ}{\pi} = \boxed{299^\circ}$	26. $\frac{269\pi}{60} \cdot \frac{180^\circ}{\pi} = \boxed{807^\circ}$	27. $\frac{89\pi}{30} \cdot \frac{180^\circ}{\pi} = \boxed{534^\circ}$
28. $\frac{47\pi}{45} \cdot \frac{180^\circ}{\pi} = \boxed{188^\circ}$	29. $\frac{91\pi}{18} \cdot \frac{180^\circ}{\pi} = \boxed{910^\circ}$	30. $\frac{107\pi}{45} \cdot \frac{180^\circ}{\pi} = \boxed{428^\circ}$