



## Practice Masters Level B

### 13.2 Angles of Rotation

AA2 Block Week 15

For each angle, find all coterminal angles such that  $-360^\circ < \theta < 360^\circ$ .

1.  $77^\circ$  \_\_\_\_\_      2.  $112^\circ$  \_\_\_\_\_      3.  $-60^\circ$  \_\_\_\_\_  
 4.  $-120^\circ$  \_\_\_\_\_      5.  $500^\circ$  \_\_\_\_\_      6.  $845^\circ$  \_\_\_\_\_

Find the reference angle.

7.  $-120^\circ$  \_\_\_\_\_      8.  $-200^\circ$  \_\_\_\_\_      9.  $450^\circ$  \_\_\_\_\_  
 10.  $600^\circ$  \_\_\_\_\_      11.  $-295^\circ$  \_\_\_\_\_      12.  $-340^\circ$  \_\_\_\_\_

Find the exact value of the six trigonometric functions of  $\theta$  given each point on the terminal side of  $\theta$  in standard position.

- |                       |                       |                       |
|-----------------------|-----------------------|-----------------------|
| 13. $(3, -4)$         | 14. $(-2, 4)$         | 15. $(-4, -6)$        |
| $\sin \theta =$ _____ | $\sin \theta =$ _____ | $\sin \theta =$ _____ |
| $\cos \theta =$ _____ | $\cos \theta =$ _____ | $\cos \theta =$ _____ |
| $\tan \theta =$ _____ | $\tan \theta =$ _____ | $\tan \theta =$ _____ |
| $\csc \theta =$ _____ | $\csc \theta =$ _____ | $\csc \theta =$ _____ |
| $\sec \theta =$ _____ | $\sec \theta =$ _____ | $\sec \theta =$ _____ |
| $\cot \theta =$ _____ | $\cot \theta =$ _____ | $\cot \theta =$ _____ |

Given the quadrant of  $\theta$  in standard position and a trigonometric function value of  $\theta$ , find exact values for the indicated functions.

16. II,  $\sin \theta = \frac{4}{7}$ ;  $\cos \theta$  \_\_\_\_\_  
 17. IV,  $\cos \theta = \frac{1}{2}$ ;  $\tan \theta$  \_\_\_\_\_  
 18. III,  $\tan \theta = \frac{2}{5}$ ;  $\sin \theta$  \_\_\_\_\_  
 19. III,  $\tan \theta = \frac{4}{7}$ ;  $\cos \theta$  \_\_\_\_\_  
 20. II,  $\cos \theta = \frac{-2}{3}$ ;  $\tan \theta$  \_\_\_\_\_  
 21. II,  $\tan \theta = \frac{-5}{9}$ ;  $\sin \theta$  \_\_\_\_\_