

Answers to Unit 3 Wkst B

1. $\frac{\pi}{6}$

2. $\frac{\pi}{2}$

3. $\frac{\pi}{4}$

4. π

5. $-\frac{\pi}{3}$

6. $\frac{\pi}{3}$

7. $-\frac{\pi}{6}$

8. $-\frac{\pi}{4}$

9. $\frac{\pi}{4}$

10. $\frac{5\pi}{6}$ or $-\frac{\pi}{6}$

11. $-\frac{\pi}{3}$

12. $\frac{2\pi}{3}$ or $-\frac{\pi}{3}$

13. $\frac{2\pi}{3}$

14. $\frac{\pi}{4}$

15. $\frac{3\pi}{4}$ or $-\frac{\pi}{4}$

16. $\frac{3\pi}{4}$

17. $-\frac{\pi}{2}$

18. $\frac{5\pi}{6}$

Note on #10, 12, and 15:

The strict definition of the range restriction for arccotangent is $[0, \pi]$. When using that restriction, you should get the first answer listed. However, it is acceptable to rewrite the question as an arctangent and use the arctangent restriction of $(-\pi/2, \pi/2)$. Using arctangent for these questions will result in the second angle listed. Either answer is acceptable for these questions.