Precalculus Unit Circle Practice

Part 1

Find the point (x,y) on the unit circle that corresponds to the real number *t*.

1. $t=\frac{\pi}{4}$
2. $t=\frac{\pi}{3}$
3. $t=\frac{7\pi}{6}$
4. $t=\frac{5\pi}{4}$
5. $t=\frac{2\pi}{3}$
6. $t=\frac{3\pi}{2}$
7. $t=\pi$
8. $t=-\frac{4\pi}{3}$

Part 2

Evaluate each of the following -- exact values only. Do these without using your unit circle.

1. $\sin\left(\frac{5\pi}{6}\right)$
2. $\cos\left(\frac{5\pi}{3}\right)$
3. $\sin\left(\frac{-5\pi}{4}\right)$
4. $\cos\left(\frac{3\pi}{4}\right)$
5. $\sin\left(\frac{11\pi}{3}\right)$
6. $\cos\left(\frac{5\pi}{2}\right)$
7. $\cos\left(\frac{-4\pi}{3}\right)$
8. $\sin\left(\frac{-2\pi}{3}\right)$
9. $\sin\left(\frac{15\pi}{4}\right)$
10. $\cos\left(\frac{7\pi}{6}\right)$

11. $\sin\left(\frac{3\pi}{2}\right)$

12. $\cos(-\pi)$

13. $\tan\left(\frac{5\pi}{4}\right)$

14. $\tan\left(\frac{-\pi}{3}\right)$

15. $\tan\left(\frac{7\pi}{6}\right)$

16. $\tan(\pi)$

17. $\tan\left(\frac{2\pi}{3}\right)$

18. $\tan\left(\frac{\pi}{2}\right)$

19. $\tan\left(\frac{7\pi}{4}\right)$

20. $\tan\left(\frac{11\pi}{6}\right)$

21. $\sec(2\pi)$

22. $\csc\left(-\frac{\pi}{6}\right)$

23. $\cot\left(\frac{8\pi}{3}\right)$

24. $\sec\left(\frac{4\pi}{3}\right)$

25. $\csc(3\pi)$

26. $\cot\left(\frac{7\pi}{6}\right)$