Section 5.1
Solutions and Hints

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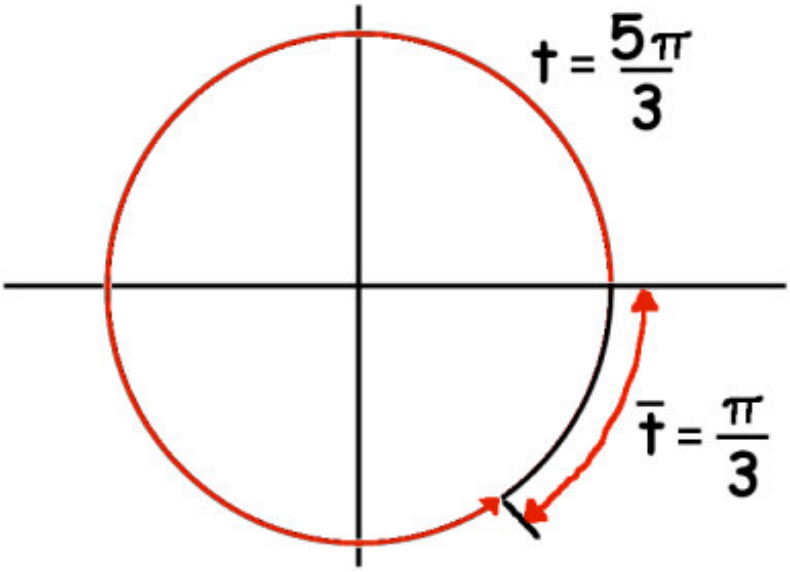
for the book:
Precalculus, Mathematics for Calculus 4th Edition
by James Stewart, Lothar Redlin and Saleem Watson.

16. Find the terminal point P(x, y) on the unit circle determined by t = (5/3)π.
Find the reference number by first drawing a diagram:



Thus we get the reference number = 2π - (5/3)π = π/3

And we see from table 1 (on page 412) that π/3 corresponds to $\left(\pm\frac{1}{2},\pm\frac{\sqrt{3}}{2}\right)$

In this case we are in quadrant IV so our answer is: $\left(\frac{1}{2},-\frac{\sqrt{3}}{2}\right)$

The observant student will see there are easier ways to do this using sin and cos.