

Math 11 - Answers to Exercise pps 49-50

J11 Exercises pps 49-50

[1] $q = 51.4286$

[2.1] $\frac{4}{5}$ [2.2] $\frac{3}{5}$ [2.3] 0 [2.4] $\frac{4}{5}$ [2.5] $-\frac{3}{5}$

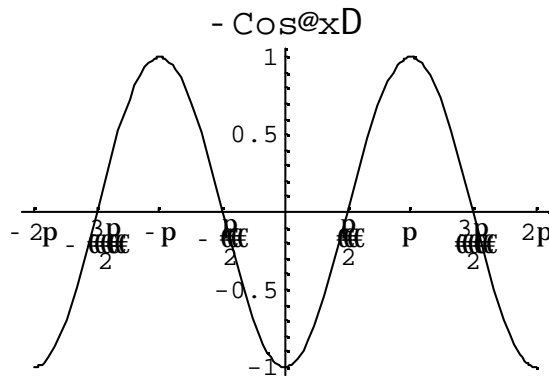
[2.6] $-\frac{4}{5}$

[3.1] 0 [3.2] $\frac{2}{\cos q}$ or $2\sec q$

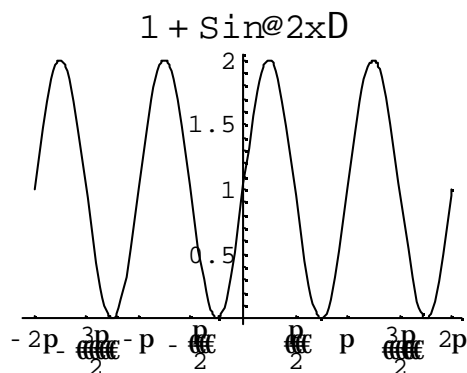
[4] Drawing helps. $\tan q = \frac{4}{3} = \frac{\text{opp}}{\text{adj}}$ " 3-4-5 triangle " $\sin q = \frac{4}{5}$, $\cos q = \frac{3}{5}$. q in Quad III,
 $\sin q = -\frac{4}{5}$, $\cos q = -\frac{3}{5}$

[5] $\sin q = \frac{5}{13}$, $\tan^{-1} q = -\tan q = -\frac{5}{12}$

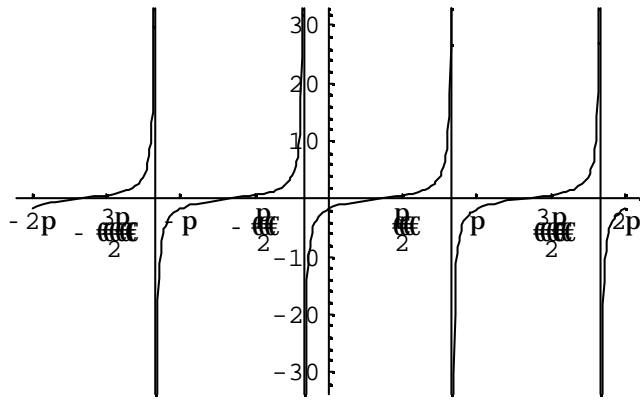
[6.1] $T = 2\pi$



[6.2] $T = \pi$



[6.3] $T = \pi$



[7.1] $\frac{4\pi}{3} \in \frac{5\pi}{3}$ [7.2] π [7.3] $\frac{5\pi}{6} \in \frac{7\pi}{6}$

[8.1] $q \in A_0, \frac{5\pi}{6} \cup \frac{7\pi}{6}, 2\pi$ can also write $0 \leq q < \frac{5\pi}{6}$ or $\frac{7\pi}{6} < q < 2\pi$

[8.2] $q \in A_0, \frac{\pi}{3} \cup \pi, \frac{4\pi}{3}$