PROBLEM:

The phase of a sinusoid can be related to time shift: $x(t) = A\cos(2\pi f_\circ t + \phi) = A\cos(2\pi f_\circ (t - t_1))$
In the following parts, assume that the period of the sinusoidal wave is $T = 1/30$ sec.

(a) "When $t_1 = 1/60$ sec, a correct value of the phase is $\phi = -\pi/2$."
Explain whether this is TRUE or FALSE.

(b) "When $t_1 = -1/40$ sec, a correct value of the phase is $\phi = -\pi/2$."
Explain whether this is TRUE or FALSE.

(c) "When $t_1 = 1/4$ sec, a correct value of the phase is $\phi = \pi$."
Explain whether this is TRUE or FALSE.