

MATH 190G Trig/Precalc: Quiz #1

Due on Monday January 29, 2018

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Problem 1

$$T = 55^\circ + 38^\circ \sin\left[\frac{2\pi}{365}(t - 100)\right]$$

Problem 2**Problem 3**

$$y = \sin\left(\frac{2\pi}{28}t\right)$$

Problem 4

The number of deer in an ecological region is given by $D = 1500 + 400 \sin 0.4t$ and the number of pumas in the region by $P = 500 + 200 \sin (0.4t - 0.8)$, where t is time in years from 1950. Graph both of these functions on your calculator. Use a solid line for deer and dotted one for pumas. Discuss what the graph means in terms of the deer and puma populations.