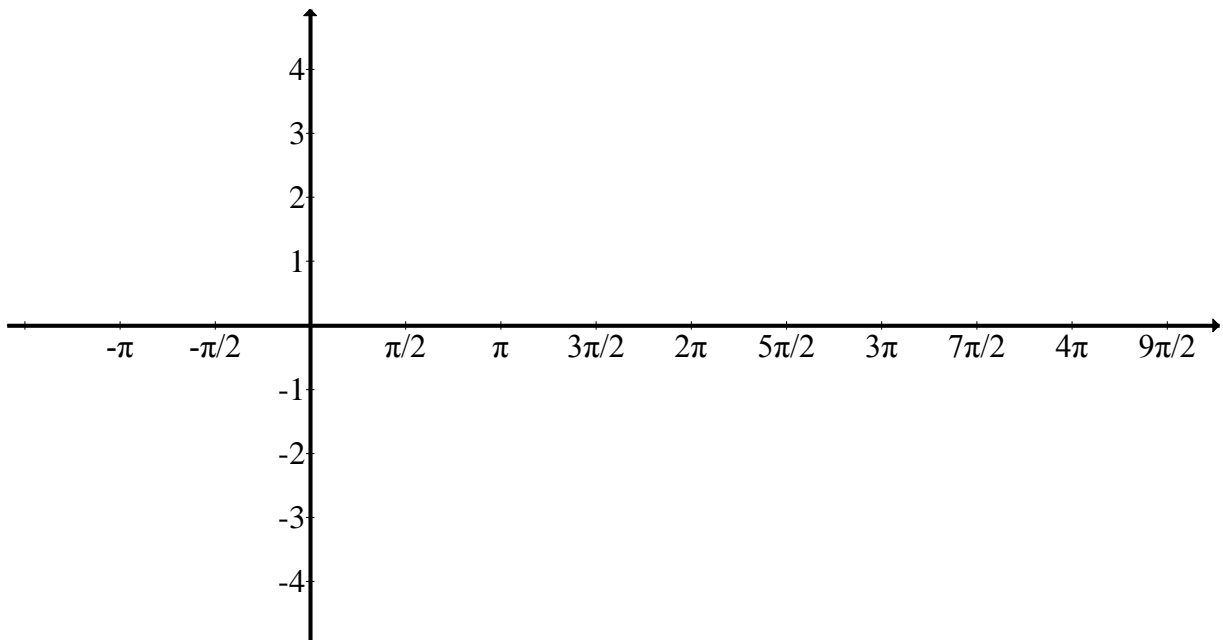
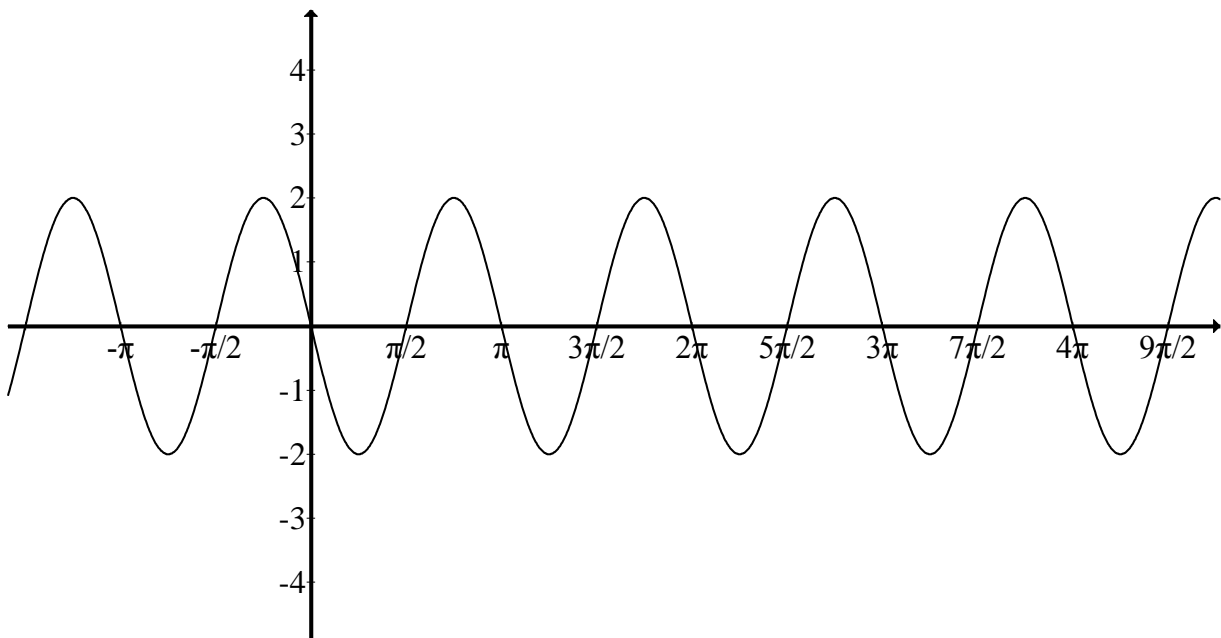


1) On the axis below, graph the function $y = \sec\left(\frac{1}{2}x\right)$



2) Find an equation for the graph shown below.



3) The volume of air, v , in cubic centimeters in the lungs of a certain distance runner is modeled by the equation $v = 300 \sin(60\pi t) + 800$, where t is time measured in minutes.



(a) What is the maximum volume of air in the runner's lungs?

(a) What is the minimum volume of air in the runner's lungs?

(c) How many breaths does the runner take each minute?