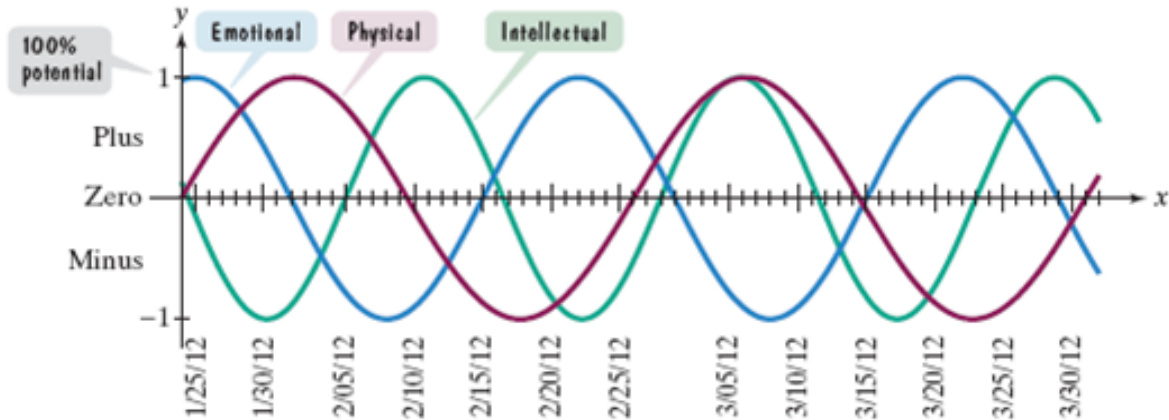


TASK: In the theory of biorhythms, sine functions are used to measure a person's potential. You can obtain your biorhythm chart online by simply entering your date of birth, the date you want your biorhythm chart to begin, and the number of months you wish to be included in the plot. Shown below is Jennifer's chart, beginning with January 25, 2009, when he was 23,283 days old. We all have cycles with the same amplitudes and tick periods as those shown here. Each of our three basic cycles begins at birth. Use the biorhythm chart to solve the exercises below.



1. What is the period of the physical cycle?
2. What is the period of the emotional cycle?
3. Create a trig equation for your emotional cycle.
4. What is the period of the intellectual cycle?
5. For the period shown, what is the worst day in February for Jennifer to run a marathon?
6. For the period shown, what is the best day in March for Jennifer to have a serious talk with her parents about getting a later curfew?
7. For the period shown, what is the best day in February for Jennifer to begin a big Trigonometry Project?
8. If you extend these sinusoidal graphs to the end of the year, is there a day when Jennifer should not even bother getting out of bed?
9. If you extend these sinusoidal graphs to the end of the year, are there any days when Jennifer is at near-peak physical, emotional, and intellectual potential?