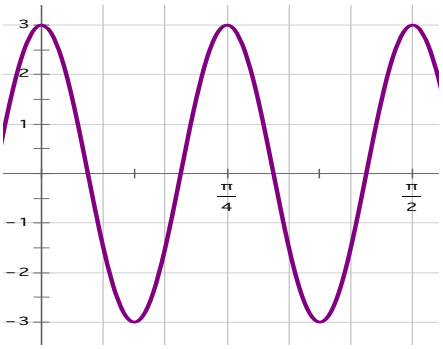
Section 4.5 – Graphs of Sine & Cosine Functions (Day 4)

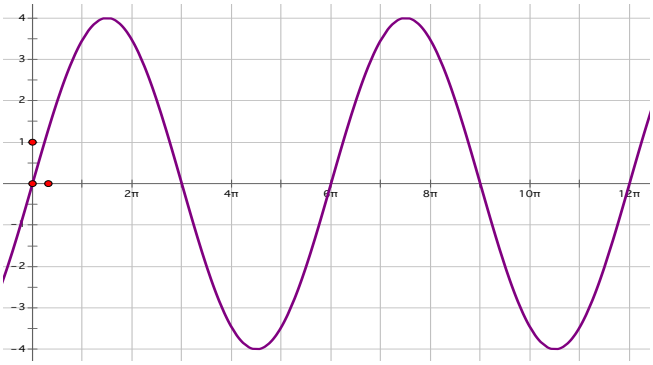
Writing the equation of the sinusoid given the graphs or other information

Ex 1: The highest point on a sinusoidal curve is at 70 and the lowest point is at -70. At day zero, the function's value is 0 and then it starts heading upwards. The period is 20 days. Write a sinusoid equation that represents this function. Hint: draw a sketch first.

Ex 2: Write an equation for this graph.

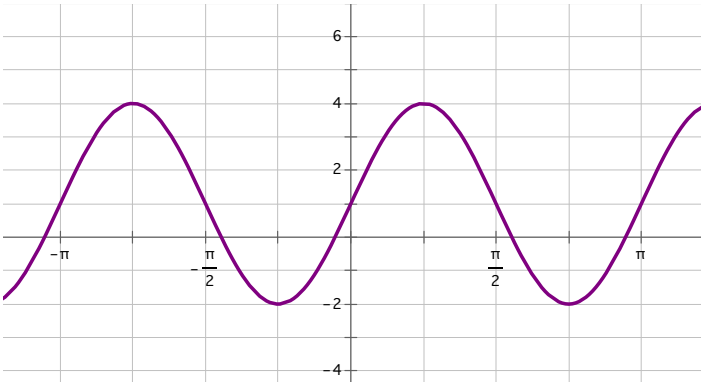


Ex 3: Write an equation for this graph.

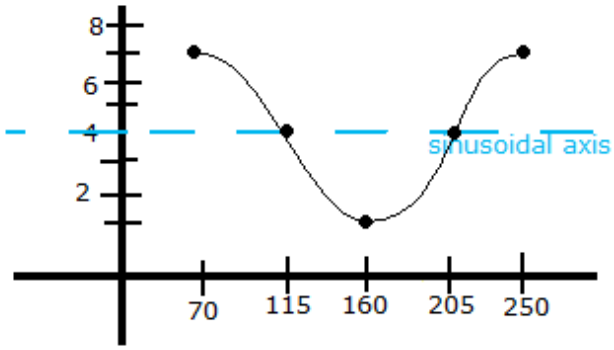


Section 4.5 – Graphs of Sine & Cosine Functions (Day 4)

Ex 4: Write an equation for this graph.



Ex 5: Write an equation for this graph. Hint: Draw in the new "axis of oscillation" ("sinusoidal axis" or "midline") first



Ex 6: Write an equation of a sinusoidal function that will model the height of a rider on a ferris wheel. Assume the rider gets on the Ferris wheel at ground level and it takes 3 minutes to get to the top of the wheel at a height of 80 feet.